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ABSTRACT

This proceedings contains approximately 100 conference papers and workshop summaries on rural health, education, and community development. The majority of the papers are concerned with conditions in rural Australia; about 20 examine rural issues in the United States; while a smaller number cover Canada, New Zealand, and European countries. A basic assumption of the conference was that rural education, health, and community and economic development can come together as a new area of study, creating new models for collaborative work on human issues in rural communities. Rural areas in both the developed and developing worlds are receiving more attention and funding than ever before. However, despite the varied and numerous programs in place in a number of countries, sparse collaboration across disciplines, cultures, and international boundaries fragments and limits the results of rural efforts. This conference was a necessary step toward collaboration and provided a thematic framework to begin to coalesce discipline-based presentations on rural issues. Such issues are related to education, health, culture, law and public policy, science and technology, social and environmental justice, communications and information equity, women's concerns, and sustainability and distance learning. A conference overview points out three major conference themes: creating community, the necessity of ethical and moral foundations, and the need for new forms of professional training and practice. The proceedings includes a list of delegates. (SV)

ED 390 592

JAMES COOK UNIVERSITY OF NORTH QUEENSLAND

ISSUES AFFECTING RURAL COMMUNITIES

Edited by D. McSWAN and M. McSHANE R.S.M.

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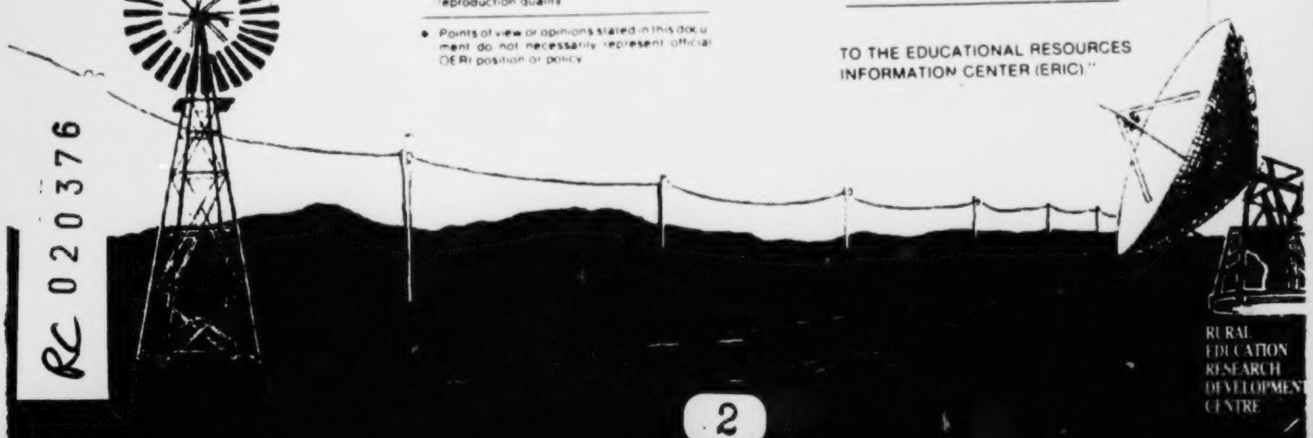

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on

ISSUES AFFECTING RURAL COMMUNITIES

Proceedings of the Conference

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10-15 July 1994

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FOREWORD

From the outset, more than two years ago, the organisers agreed that the Conference would be underpinned by the proposition that rural education, health and community and economic development can come together as a new area of study, creating new models for collaborative work on human issues in rural communities.

Rural areas in both the developed and developing worlds are receiving more attention (and funding) than ever before. Academic, professional, philanthropic, development projects and government programs are in place in a number of countries. However, sparse collaboration across disciplines, cultures, and international boundaries fragments and limits the results of the present extensive rural efforts.

This Conference was seen as a necessary step toward collaboration. It was a unique international occasion for rural people, scholars, professionals and government agencies, working in rural related areas, to come together to share information, concerns and visions of the future and to develop formal and information networks.

The Conference provided a thematic framework to begin to coalesce discipline-based presentations on rural issues. These were related to education, health, culture, law and policy, science and technology, social and environmental justice, communications and information equity, women's concerns, sustainability and distance learning. Specifically, the Conference explored the relationship between rural education, health and community development for its implications for interdisciplinary, international and intercultural collaboration.

Outcomes of the Conference included: the development of an international association of rural scholars and professionals; a significant publication, joint research projects, stimulation of teaching and research (and funding) in tertiary institutions; closer working relationships among scholars, professionals, government bureaucracies and agencies; identification of priority research and development issues and establishment of genuine cross-disciplinary understanding and co-operation.

The Rural Education Research and Development Centre (JCUNQ) is committed to establishing, as a specific outcome of the Conference, an international multidisciplinary faculty of scholars and professionals dedicated to the development of a thesis-only doctoral program which will initiate and facilitate inquiry in this new field of interdisciplinary research in rural communities.

The Conference proved to be timely and attracted significant state and national media coverage. Reactions from politicians and rural industry bodies sharply displayed a number of issues and problems faced by citizens of rural communities.

I should like to pay tribute to a number of people whose thinking profoundly influenced the nature of the Conference: Dr Toni Haas, Mr Bert Johnston, Mr Paul Nachtigal, Dr Susan Raftery, Dr Jack Shelton and Dr Jonathan Sher. They were generous of their time and talents and were unfailingly supportive of the notion of an International Conference. For conceptualising and articulating the outcomes of the Conference, thanks are due to the rapporteurs Dr Toni Haas, Professor Emeritus Ted Scott and Dr Jonathan Sher.

Many people and organisations supported the Conference and they are acknowledged elsewhere. However, particular appreciation is directed to The Lyndhurst Foundation, Lady Pearl Logan, the Rural Health Policy Unit, Queensland Department of Health, AIDAB, Townsville City Council, James Cook University, Program for Rural Services and Research, University of Alabama and the Northern Regional Health Authority.

My personal thanks go to the Staff of the Rural Education Research and Development Centre and to Olivia Hill, Gloria MacDonald and Sharon and John Baker.

David McSwan

David McSwan (Dr)

WELCOME ADDRESS

The Vice-Chancellor of James Cook University of North Queensland
Professor Ray Golding

Good Morning Ladies and Gentlemen.

It is with great pleasure, on behalf of James Cook University of North Queensland, that I welcome you to this International Conference on Issues Affecting Rural Communities.

This conference is being hosted by James Cook University's Rural Education Research and Development Centre, which was established five years ago with support from both the university and the private sector.

From humble beginnings, it has grown and developed into Australia's foremost research and teaching centre in the field of rural education, health, and community and economic development – and has established an impressive international reputation.

The Centre is committed to excellence in research, teaching and development in those areas which affect people living in rural and remote locations.

One of the University's major goals is to serve the North Queensland region by providing facilities and services in higher education which meet the expectations of the community; by contributing, where appropriate, to the development of North Queensland; and by providing a vision for leadership in this region.

It was the University's growing interest in and concern for rural education, our very firm links with the rural community in Queensland, and the growing national and international interest in rural education which prompted the establishment and development of the Centre.

As well, the University is committed to the establishment of Australia's first endowed Chair in Rural Education, located within the Centre, and funded by the community.

In this fund-raising endeavour, it is important to acknowledge the efforts and leadership of Lady Logan as Chairman of the Appeal Committee.

The Rural Education Research and Development Centre is the only centre of its kind in Australia.

Its work includes significant fundamental research in key areas of concern for people living in rural and remote areas, the development and teaching of short courses to meet the needs of residents and service providers in rural areas, and the management of consultancies for government and non-government bodies in the areas of education, health, community and economic development.

Some of the research projects which have been undertaken by the Centre include a study into the services provided to disabled students in rural areas, the future of family farming and its relationship to education, and teacher retention rates in country New South Wales.

In the area of teaching, we have also displayed initiative and achieved success.

At James Cook University, we provide undergraduate studies which offer programs in rural education and teaching, and a Master of Education in Rural Education – the first such course in Australia.

To date, the University has awarded four PhDs on issues which affect schooling in rural and remote areas.

The University is proud of its long-standing and positive links with rural communities in North Queensland and it is especially proud of the work of the Rural Education Research and Development Centre.

This International Conference on Issues Affecting Rural Communities is an Australian, and possibly, World-first.

Never before have so many rural people, scholars, professionals and government agencies working in rural related areas, come together in this way to share information, concerns, visions for the future, and develop formal and informal networks.

Until now, there has been very little collaboration across disciplines, cultures and international boundaries and this has fragmented and limited the results of the present extensive rural efforts.

I believe rural education, health, community and economic development can come together as a new area of study, and create new modes for collaborative work on human issues in rural communities.

This conference is a necessary step towards this combined approach.

During this week, delegates will address you and papers will be presented from more than a dozen countries throughout Australasia and the Pacific, Asia, North America and Europe.

While you come from many different parts of Australia and the world, you will find you have a common interest in, and concern for, the needs of people in rural and isolated regions.

During the next few days you will explore, through this conference, a range of issues including rural health policy and practice, education in remote areas, and sustainable economic, social and community development in rural areas.

As a result, it is hoped an international association of rural scholars, professionals and government representatives will be created - people who are committed to future information sharing and the establishment of genuine cross-disciplinary understanding and cooperation.

This conference has been in the planning for two years. It would not have been possible without the generous financial support of its sponsors. They include the Lyndhurst Foundation in the USA, the Queensland Department of Health, the Queensland Department of Business Industry and Regional Development, the Northern Regional Health Authority, the Program for Rural Services and Research at the University of Alabama, and the many others listed on your program.

Many of you have come a great distance to attend this week's conference. To those of you, welcome to Townsville.

I urge you, if you can find some time during the next few days, to visit the main campus of James Cook University at Douglas. Visitors are always welcome.

Meanwhile, I am sure you will find this week stimulating, productive, informative and rewarding and I wish you every success with your conference.

BACKGROUND PAPER

BEYOND THE CONVENTIONAL WISDOM: RURAL DEVELOPMENT AS IF AUSTRALIA'S RURAL PEOPLE REALLY MATTERED

Dr Jonathan Sher and Katrina Rowe Sher — United States of America

When we were approached by the Australia's Commonwealth Department of Primary Industries and Energy (DPIE) in June, 1993 and asked to write a report on rural Australia, the officials there did *not* have in mind the document now in your hands. They asked us to prepare a paper that would focus on strategies for advancing "rural development" through education and entrepreneurship. While they encouraged us to establish the broader context — to sketch the whole puzzle into which the education and entrepreneurship pieces could be placed — this was assumed to be a minor part of the assignment.

Their idea made sense to us. It suited our backgrounds and seemed like a fairly straightforward task. Katrina brought years of teaching in rural South Australia to this assignment — including her work as the director of a Commonwealth Schools Commission special project in the outback communities of Hawker, Leigh Creek, Marree, Nepabunna and Parachilna. Complementing Katrina's perspective were Jonathan's years of international experience as a researcher, author and program developer in both rural education and entrepreneurship — including his work at Organisation for Economic Cooperation and Development (OECD) as the head of such initiatives as the Education and Local Development Program. To be frank, we reckoned this would be a reasonably easy assignment (even given the Department's draconian two month deadline!).

Everyone simply assumed the contextual information required was readily available. Surely, the Government had a comprehensive rural development policy lying around somewhere (even if only gathering dust). Similarly, we all assumed that Australia's seemingly unending "rural crises" must have prompted some journalists, officials or professors to publish useful overviews of the people, places and economy of rural Australia. Accordingly, we thought that all we had to do was go to the right bookshelf; check out a few such sweeping surveys of the concerns and conditions of rural communities; summarise their findings; and then, get on with the analysis of our own narrower topic.

These assumptions were wrong. We discovered an amazing lack of written material about rural Australia and rural Australians as a whole. There was more detailed information about specific rural places, particular rural groups and individual rural industries than we could have absorbed in a decade. However, we could not find a single source that convincingly captured the realities of the Australia existing beyond the nation's cities and suburbs. Despite heaps of data about many rural "trees", and a few well-known "groves", the rural "forest" remained invisible. Moreover, there simply was not a full-blown, credible Australian rural development policy to be found.

Consequently, the original DPIE assignment to which we so happily had agreed suddenly seemed ill-conceived. After all, how could we craft two appropriate pieces for a puzzle if the overall design and dimensions of the puzzle did not exist? So, too, what could we (or anyone else) sensibly say about education's or entrepreneurship's contribution to the realization of Australia's rural development policy, *if there is no rural development policy in the first place?*

Our solution to this dilemma was to request permission to shift the balance in the report. We now thought it imperative to spend most of our time producing a solid context, and a useful framework, for a national rural development policy. Education and entrepreneurship still would be taken into account. However, they would no longer be the main focus. Despite whatever misgivings they may have had, the DPIE officials with whom we were working agreed to this reconceptualization of the task at hand.

Essentially, the paper in your hands retraces the path we had to travel as we did our research and writing. It is simultaneously an outline of what rural development could — and we believe *should* — encompass as Australia enters the 21st century, and a brief explanation of how and why we arrived at the recommendations offered here.

The story begins (for it is written as a narrative, rather than as a technical monograph) with an exploration of the following three pernicious, and yet surprisingly pervasive, Australian myths: a) that the nation's concentration of people and resources into a handful of large, coastal, capital cities means that rural Australia and rural Australians are peripheral to the nation; b) that farmers and farming communities are the "alpha and omega" of rural Australia; and, c) that whatever is best for the agricultural industry is the same as what is best for rural Australia and rural Australians as a whole.

In the course of explaining why all these common beliefs are myths, we highlight the many ways in which the entire country — even with its ostensibly post-industrial society and economy — is deeply dependent upon rural Australia. We also underscore the tremendous diversity of the nation's rural people, communities and economies.

From this point, we look at the extent to which inaccurate stereotypes and prejudices about rurality have shaped — or more precisely, misshaped — public policies and programs (no matter what political party happened to be in power). We suggest explanations for the evolution of the counterproductive confusion of agricultural and rural interests. Nonetheless, such explanations are not legitimate excuses for all the ways in which the needs of Australia's non-farm rural *majority* routinely have been ignored. A recent OECD report is cited to indicate the growing international recognition that new ways of thinking and new forms of policy in relation to rural people and places are needed urgently.

We then turn our attention toward the profound role governments at all levels have played in the development of rural Australia — even without a coherent and explicit rural development mission. In other words, we discuss how the absence of an over-arching policy for rural Australia has not prevented governments from having tremendous effects on rural people and places. Three major forms of governmental intervention — industry support policies and subsidies, government-supplied income for individuals, and social policies and programs — are singled out for comment.

The story continues with an analysis of what we regard as Australia's three real rural crises. The first such crisis is the radical decoupling of the fate of the primary industries from the fate of traditional primary producers. We show why the day is fast approaching when Australia will confront the bitterly ironic dual reality of record profits/export earnings from the primary sector and record numbers of traditional primary producers (and of the businesses dependent upon them) battling just to survive.

The second rural crisis stems from the unwillingness of governments to seriously support rural Australia's latent economic diversity. While "diversification" rhetoric abounds, we note it has not been matched by effective strategies for turning these good words into equally good realities.

The final real crisis can be found in the complacency on all sides that allows the long-standing combination of industrial and social policies/programs to function as a *de facto* rural development strategy. From failing to solve the problems of rural employment, to perpetuating social policies with notably anti-social consequences, this odd patchwork approach to rural policy is wearing thin. We argue that it needs to be supplanted by an explicit, comprehensive, community-oriented rural development policy.

Our examination of the current *de facto* rural policy convinced us it is fatally flawed and unworthy of continued support. We think Australia should construct a rural development policy giving priority to six goals: a) a growing rural population base; b) rural people and communities reaping an equitable share of the rewards derived from rural resources; c) a growing and diversifying rural economic base; d) a growing rural employment base; e) an improved quality of rural life; and, f) stronger, more cohesive rural communities. While they sound rather innocuous at first, acting upon these six goals would entail fundamental changes in rural policy and programs.

The story then shifts from *what* needs to be accomplished to the issue of *who* will be responsible for breathing life into these six goals. A case is made for a major organizing effort both by and among rural people themselves. The key alliances that should be created and activated are within rural communities; across rural communities; between rural communities and governments; between the public and private sectors; and, last but not least, across the urban-rural divide. The point is made that forming and sustaining such alliances is not merely a pre-condition for rural change. It is also one hallmark of genuine and lasting rural development.

Finally, the story concludes with our responses to the question of *how* these five groups of allies should proceed in implementing the six rural development goals already outlined. The basic recommendation is to focus action on four main clusters of activity — what we refer to as the four "E"s: empowerment, environment, entrepreneurship and education. We discuss the meaning and manifestations of each of these four "E"s .

Here, as throughout the paper, we remind readers that the rural development challenges facing Australia cannot be met effortlessly or painlessly. However, we have no doubt that a major renewal and improvement of rural communities and economies *can* be accomplished successfully. Australia has some very important advantages and assets, from comparatively strong human resources to a stunning array of natural resources, that make the recommended rural development goals far more likely to be attained here than virtually anywhere else in the world.

Our recurring theme is that the key to unlocking Australia's rural potential can be found in the democratic design and effective *local* implementation of a new *national* rural development policy. We advocate a policy that places primary emphasis on the actual well-being of rural people and communities, rather than the "paper performance" of a few rural industries. For Australia to be a clever nation as well as a lucky one, we stress the need for everyone to move beyond the conventional wisdom and to embrace a vision of rural development in which the well-being of rural people and communities really *do* matter most.

BRINGING THE BIG PICTURE INTO FOCUS

At the dawn of the 19th century, well-educated Europeans understood the characteristics of mammals. For instance, they "knew" that mammals, unlike ducks, neither have bills, nor lay eggs. Imagine the consternation that followed the discovery (by Europeans) of the platypus in 1797 along Australia's Hawkesbury River.

Because the existence of such a remarkable creature challenged deeply-ingrained beliefs, the initial impulse back in London was to dismiss this discovery as a prank being played by a talented taxidermist with an odd sense of humour. This was neither the first nor the last time when those in the official seats of power and knowledge chose to cling to familiar ideas, rather than adjust to the implications of new realities. Finally, of course, the evidence about the platypus became indisputable. Accordingly, educated people had to develop a new definition, and a revised understanding, of mammals.

Recalling the saga of the platypus is useful in coming to grips with the story of rural Australia today. Just as cherished assumptions about mammals died hard at the turn of the 19th century, so, too, comfortable conceptions of rural Australia seem fairly intractable as the turn of the 21st century approaches. Not surprisingly then, certain perception-altering observations from, and about, the Australian bush tend to meet with as skeptical a reception in Canberra (from all political parties) as the antipodean platypus received in London two centuries ago.

It is worth remembering, however, that the discovery of the platypus did not invalidate all the accumulated conventional wisdom about the nature of mammals. Indeed, the existence of the platypus eventually led to a more sophisticated and powerful understanding of this zoological classification. Similarly, taking into account some oft-neglected realities about Australia's rural people, places and economy will not render useless all prior knowledge.

What it might mean is that the ways in which leading Australians view, think about, discuss, research, report on, and act in relation to rural Australia and rural Australians will shift in a new direction. We believe such a new direction — if based on a firmer grasp of both the realities and the possibilities of Australian rural development — could be a blessing.

BOTH ENDS, LITTLE MIDDLE

Everyone knows that mammals don't lay eggs. Except in Australia. Similarly, everyone also knows that "sparsely-populated" and "urbanized" are mutually exclusive terms. Except in Australia.

The only continent united as one nation, the largest island on the planet, Australia also holds the distinction of being both one of the world's most urbanized and most sparsely-populated countries. The sparsity of population is reflected in the fact that Australia approximates the physical size of the contiguous United States and yet, it has a national population equivalent only to that of greater New York City. Stated even more dramatically, Australia encompasses twenty times more land than Japan, yet metropolitan Tokyo alone has nearly twice as many people as all of Australia.

What the demography of Australia illustrates beautifully is that even such common descriptions as "sparsely-populated" — meaning a relatively low number of people per square kilometer of land— can create significant misperceptions. If Australia's people were evenly distributed across the nation, then this would indeed be a very sparsely-populated country by international standards.

In reality, Australian population is anything but evenly distributed. Rather, it is tremendously concentrated into a small number of coastal, capital cities. More than 80% of Australians reside within 50 miles of the coast and more than 85% are urbanites (Budge, et al.,1992;Walmsley & Sorensen,1993) . This is an unparalleled degree of urbanization, outside of nations such as Singapore, that physically are bereft of rural living space. Of course, Australia's settlement pattern has been influenced profoundly by environmental factors rendering most of the nation's interior inhospitable to major population centres.

Even these general statistics understate the concentration of Australia's population, for they leave the impression that urban Australia could comprise many medium-sized cities and big towns spread across Australia (a pattern found in the U.K., the U.S. and most other OECD countries). Such is not the case "Down Under". On the whole Australian continent, there are only 31 places having a population in excess of 25,000 (Budge et al.,1992).

Further, the capital city of each state and territory holds the lion's share of the people. The percentage of total residents found in the capital cities ranges from highs of more than 70% in South Australia and Western Australia down to roughly 40% in Tasmania and Queensland (Walmsley and Sorensen,1993).

Since the time of European settlement, Australia has been a predominantly urban nation with a tiny number of large population centres, a large number of tiny population pockets, and remarkably few places in between. The case of South Australia shows this longstanding, highly-skewed national pattern of population distribution in sharp relief. Witness, in Table 1, the startling gap — the "missing middle" — in the size of settlements among this state's top ten urban areas (Salt,1992):

TABLE 1

Ten Most Populated Urban Areas in South Australia, 1989

Adelaide	1,037,702
Whyalla	26,731
Mount Gambier	22,214

Mount Barker (Adelaide Fringe)	17,268
Murray Bridge	15,880
Port Augusta	15,7[illegible]
Port Pirie	15,224
Port Lincoln	12,953
Renmark	7,814
Onkaparinga (Adelaide Fringe)	7,532
Total Population in these Ten Areas	1,179,084
Total State Population	1,423,300

Given the distinctive manner in which Australia's people are clustered, there is some truth in the idea that every place beyond the capital cities is considered, and dealt with, as part of the "hinterland". In fact, there are people who believe the really important dividing line is not the one between "urban" and "rural", but rather the one separating Sydney and Melbourne from everywhere else in Australia.

The metropolitan concentration of Australia's people has not dissuaded government officials, academicians and other interested parties from wrestling with the age-old question of "what is rural?" Like their counterparts in other OECD nations, Australians have generated, and acted on the basis of, a wide variety of (conflicting) definitions of "rural". In general, there is a preference for numerical definitions based on the population size of particular localities.

These range from one rather restrictive Australian Bureau of Statistics' definition of "rural" as the open countryside and population clusters of less than 1,000 people, to a rather generous recent Commonwealth definition of "rural" as all non-metropolitan places having fewer than 100,000 residents. There are, however, numerous alternative definitions, including those based on population density, economic criteria, socio-cultural factors and degree of "remoteness" from major cities (Garnaut,1993; Halfacree,1993; and Nichol,1990).

We question the value and reasonableness of *any* single, all-purpose definition of "rural". We believe that the true meaning of rurality varies considerably from nation to nation — and, sometimes, even within different parts of the same nation — as well as from purpose to purpose. What a French agricultural official, an Australian labor market analyst, and a Canadian cultural anthropologist mean by "rural" may be very different. In our view, that doesn't imply that somebody must be wrong. We further believe that the main thrust of the arguments and suggestions made in this paper hold true no matter which of the established Australian definitions of "rural" the reader cares to employ (Commonwealth Department of Primary Industries and Energy,1992a; Garnaut,1993).

THE CENTRALITY OF THE PERIPHERY

Australia has the vast majority of its population, its corporate headquarters, its government offices, its universities and its cultural institutions based within a handful of large metropolitan areas. So, it is only natural to assume that Australia's major cities are the places around which the nation as a whole revolves. This, of course, implies that the people and places found outside these major population centres must be of relatively little importance to the nation as a whole. On the face of it, Australia appears to be the quintessential example of a nation having dominant urban "planets" orbited by numerous little rural "moons".

Indeed, this mental map of powerful urban centres (the strong core) and relatively powerless hinterland communities (the weak periphery) has guided — albeit often only subconciously — the portrayal of, and policies toward, the nation's rural people and places. Today, this mental map tends to engender sympathy for the rural Davids pitted against the urban Goliaths of Sydney, Melbourne,*et. alia*. Accordingly, the depiction of rurality one finds in the media is, as often as not, laden with sentimentality. Sympathy, however, is not the same as respect. And, having a dewey-eyed view of rural life is not the same as having a clear-eyed understanding of the roles rural people and places actually play in Australian society.

To picture the countryside and its inhabitants in nostalgic terms is to fail to see them as vital communities, as key contributors to the national economy, and as people and places with a significant role to play in creating Australia's future. Indeed, it sometimes seems as if rural Australians are defended by their urban friends on the same grounds as other "bushland fauna" whose habitat is under threat.

Even if rarely articulated, all Australian governments have been influenced for decades by this "strong core, weak periphery" mental map of Australia. There is a long string of government initiatives — particularly in the realms of social and educational policy — predicated on a deficit model of Australian rurality. In other words, the basic idea behind most social and educational policies aimed at rural Australia is one of overcoming, or compensating for, numerous perceived forms of rural "disadvantage". The worm in this particular apple can be found by following the underlying logic to its logical conclusion. If rurality is an inherent disadvantage, then the only possible way of becoming advantaged is to become urban[1]

We believe that the mental map undergirding so much of the reporting, policymaking, thinking and planning in relation to rural Australia and rural Australians is fundamentally flawed. In part, it is flawed by the deeply contradictory notion that rural commodities may be important, but that the rural people and places producing these commodities are unimportant. Mostly, however, this map is wrong because the assumptions on which it is based are at odds with fundamental Australian realities.

This erroneous mental map — this pernicious misperception — is both a cause and a consequence of what we refer to as: ***Myth #1: Rural Australia and rural Australians are peripheral to the national interest, the national economy and the nation's future.***

To understand how extraordinarily central (rather than peripheral) the rural sector is to Australia's economy, society and future prospects, just imagine the consequences of all rural Australians packing their bags and moving to the capital cities before the end of the year. "No worries", you might reply. After all, Australians living in the bush and in places having fewer than 1,000 residents comprise less than 15% of the nation's population.[2] "Sure, it would put a bit of a squeeze on the cities, but she'll be right, mate. Cities are used to expanding. Australia's big population centres have absorbed lots of new people in recent years. In fact, the population has more than doubled since 1950 and everything is okay."

Try thinking again. It really doesn't take very long, nor require very much imagination, to figure out that the negative consequences of a rural exodus would be totally out of proportion to the sheer number of people migrating to major urban areas. In truth, the effects would be catastrophic and Australian society, as we know it today, would collapse in short order.

Why? Because the contributions of rural Australia and rural Australians to the nation are so much greater — and far more essential to the nation's well-being — than commonly is recognized or taken into account. Most Australians probably know the facts that follow. However, these facts appear to have made remarkably little cumulative impact on society's understanding of how central the rural "periphery" is to the national standard of living, as well as to Australia's hopes of *at least maintaining* such a standard in the future.

It is worth remembering the following about rural Australia:

1. *Rural Australia is the source of food self-sufficiency for the entire nation.* Australia is not dependent on any other nation for a stable and diverse supply of good quality, low cost foods. This is not a trivial factor. The downfall of the Soviet empire — and the current political/social instability there, as in much of the world — has at least as much to do with the people's hunger for a variety of good foods at affordable prices, as it has to do with their hunger for democratic government. Australia is in the minority of nations that genuinely are self-sufficient in terms of food production. In an unstable world, this fundamental advantage looms increasingly large.
2. *Rural Australia is the wellspring of national self-sufficiency in terms of virtually all other raw materials/natural resources.* Australia's international reputation as a resource-rich, "lucky" country is

well-deserved. While Australia imports small quantities of food and other primary products (e.g., wood), the fact remains that, if push came to shove Australia could sustain itself in terms of its fibre, energy and other natural resource needs strictly from domestic sources. All the coal, petroleum, wool, cotton and other key materials allowing Australian's this degree of self-sufficiency — and of economic independence — come from rural Australia. And, it is rural Australians who make these resources available to the nation.

3. *Rural Australia is the cornerstone of Australia's export economy.* Depending on the definition used, somewhere between one seventh and one third of Australia's citizens are rural.[2] Yet, rural Australians are directly responsible for 2 out of every 3 dollars Australia earns from international trade (Commonwealth Department of Foreign Affairs and Trade,1992).

   Export earnings coming into the Australian economy allow Australian consumers (the great majority of whom are urban) to buy foreign goods — from Apple computers, to Honda cars, to Twinnings teas — without the nation incurring a crippling level of foreign debt. Beyond consumer goods, most of what Australia imports is the machinery necessary for the nation's overwhelmingly urban-based manufacturing industries to operate (Commonwealth Department of Foreign Affairs and Trade,1993).

   In essence, it is rural Australia's exports that underwrite much of urban Australia's imports. Australia's economy no longer "rides on the sheep's back", as was the case not long ago when the sale of wool alone accounted for 50% of the country's export earnings. However, it still is true that the rural contribution to Australia's international trade portfolio far exceeds the rural portion of Australia's population.

4. *Rural Australia is the foundation of a disproportionately high share of Australia's economic assets and economically productive activity.* A significant amount of urban economic activity — such as the operations of insurance companies, banks, sharebrokers, and government bureaucracies — generates no new wealth (i.e., a larger economic pie). It merely circulates and redistributes existing wealth.

   New wealth can be created only in three ways. The first is by extracting or cultivating primary products: through mining, agriculture, forestry, and fishing. Obviously, all these fundamental wealth-generating activities are rural ones.

   The second way to create wealth is by adding value to products — for example, by transforming a bunch of grapes into a bottle of wine. Many such value-adding activities have a primary (rural) product at their core. Thus, a furniture factory may be based in a capital city, employ urban workers and be counted as an urban industry — yet, it remains dependent on rural areas for its basic inputs (e.g., wood, fibre, etc.).[3] What often gets forgotten is that rural products are the ones to which further value *can* be added. The same is rarely true of the work "products" of urban-based professionals, service workers and government employees.

   The third route to wealth creation is by generating foreign earnings, beyond those acquired through the export of both primary and value-added products. Tourism is one major example. For international tourists, most of Australia's main attractions are rural, (e.g., the Outback and the Great Barrier Reef). As all the above should make clear, rural Australia is absolutely central to the nation's capacity to create new wealth, and, thereby, to expand Australia's economic pie. Thus, to see rural Australia as "peripheral" is to be blind to some fundamental economic realities of Australian life.

5. *Rural Australia is the safety valve taking pressure off the cities — and the preferred place for Australian city-dwellers seeking to change their residence.* In earlier times, metropolitan Australia was happy to have, and able to successfully integrate, a continuing stream of people from the countryside. Those days are gone. The capital cities are grappling with problems of unemployment, pollution, traffic congestion, crime, skyrocketing infrastructure costs, affordable housing shortages, overcrowding, an increasing level of anti-social behaviour, and other evidence of declining livability.

   The last thing they need is for very many of the nation's five million non-metropolitan residents to vote with their feet — against deteriorating rural economic opportunities and discontinued local services — by moving to these cities. Hence, any significant decline in non-metropolitan Australia's well-being would end up being very bad news for *metropolitan* Australia as well. Australia now has the same choice every other nation faces at some point in its history: to solve rural problems at their source, or wait until they become more complex and intractable urban problems. Understood in these terms, it is not a tough choice.

   The continued willingness, and ability, of rural Australians to stay rural would be a boon to urban Australia in that it would help the capital cities avoid becoming dysfunctionally over-crowded. At the same time, urban Australia needs viable options for its residents who are redundant in employment or economic terms; who are discontent with the realities of urban life, or who are anxious to find somewhere better to live, raise their families, work or retire. Surveys of metropolitan Australians consistently have shown that a majority express a marked preference to reside in non-metropolitan areas. This desire often has been thwarted by lack of job (and other economic) opportunities in the countryside.

   Much of this frustrated "demand", of course, might be nothing more than overly-romantic fantasies about life beyond the capital cities. And yet, the attraction, and importance, of non-metropolitan alternatives for Australia's urban-dwellers cannot all be dismissed as idle chit-chat. The most recent analysis of migration within Australia indicates that approximately 60% of the people leaving their home city did, in fact, take up residence in non-metropolitan places (Salt,1992).

   For example, of the 195,816 people moving from Melbourne to all other places within Australia between 1981-86, two thirds (64.8%) went to non-metropolitan areas (Salt,1992). Especially for city people who have retired or who have income sources other than from employment, non-metropolitan places have become popular, permanent destinations (Flood, et al., 1991 and Salt, 1992).

   Consequently, rural decline properly can be seen as a formidable threat to the interests of metropolitan Australia in at least two distinct ways: (a) as the trigger for a rural-to-urban exodus that would cause incalculable harm to Australian urban life and, (b) as the force denying a very substantial number of city-dwellers the opportunity to fulfill their desire to eventually move to the non-metropolitan places they prefer.

6. *Rural Australia is the primary location of renewal and recreation for most Australians.* Rural Australia serves the nation as a safety valve in a more transient, but equally important, sense. Rural Australia is the place city-dwellers go to escape the tensions of urban life and to enjoy the benefits of being "on holiday". A recent report noted that 70% of all Australians choose to spend their vacations somewhere in rural Australia (Commonwealth Department of Tourism,1993a). When one adds to this figure the large number of second homes Australians have in the countryside and along the coast, the value Australians place on the restorative properties of rural places and rural living becomes obvious.

   Compared to what Australians would spend on foreign travel to reach and enjoy places of comparable quality, rural Australia is not only convenient — it is a genuine bargain. The recreation and renewal options rural Australians provide to the nation directly saves domestic travelers — most of whom are urban — a great deal of money. It also prevents the "leakage" of all these dollars to other countries. That is, by remaining in Australia, these funds have a beneficial multiplier effect on the domestic economy, create jobs, and have a favourable impact on the nation's balance of trade.

7. *Rural Australia is the touchstone of Australia's international identity and cultural distinctiveness.* When most people elsewhere in the

world think about Australia, their images (largely positive) are of the Outback, the Reef, the unique fauna of Australia, traditional Aborigines and — for better or worse — Crocodile Dundee. Indeed, the only urban images of Australia are the architecture of the Sydney Opera House and, perhaps, the Sydney Harbor Bridge. The reality that Australia's major icons *are* rural seems to alternately amuse and annoy Australians. This is not surprising, given the extent to which the nation's population is concentrated in coastal, capital cities — and, thus, the extent to which these international symbols of Australian identity are distant from the daily reality and actual identity, of most Australians.

To understand the potency of Australia's rural images, try to think of Australian movies, books, plays, paintings, or crafts that: a) have captured the popular imagination of the world and, b) portray contemporary metropolitan Australia. It is not easy to do so. Films are a good example of this phenomenon. *"Malcolm"*, *"Strictly Ballroom"* and *"Careful, He Might Hear You"* are wonderful movies, but they are at odds with the world's stereotypic images of Australia. That may go a long way toward explaining why these excellent films never attained the popularity of such movies as *"Crocodile Dundee"* (I and II), *"The Man from Snowy River"* (I and II), *"Gallipoli"*, *"The Thorn Birds"*, *"My Brilliant Career"*, *"A Town Like Alice"*. Similarly, when the Disney studio chose to make its popular *Rescuers Down Under* animated feature film, the setting (predictably) is a fantasy version of "back of beyond" Australia. Even the "Mad Max" series of films plays far more on the image of an apocalyptic Outback than it does on anything resembling life in contemporary urban Australia.

Sydney and Melbourne may be the big actors in the domestic Australian scene, but on the world stage, they make only cameo appearances. In this sense, Australia is reminiscent of Scotland. There, the Glasgow-Perth- Edinburgh-Dundee corridor is the home of an overwhelming proportion of Scotland's people, the seat of government and finance, and the main domestic reference point. Nevertheless, it is the Highlands and Islands that long have captured the world's imagination and defined Scotland's international image.

Beyond such cultural exports as the films mentioned above, and the foreign market for products based on Australia's rural icons (from Koala cuddly toys to boomerangs), the other indicator underscoring the economic and cultural importance of rural Australia is international tourism. It certainly is true that nearly all international visitors spend time and money in Australia's capital cities. Indeed, they have little choice in the matter, given international flight schedules. However, the majority of people choosing to come all the way to Australia strictly as tourists were not motivated by a desire to see only Sydney, Melbourne, and the other capital cities (Commonwealth Department of Tourism, 1993b). Rather, they hope to experience something of *rural* Australia.

When Australians reflect on their status as "flavour of the month" (for years now!) among international tourists, they need to remember that it is the places, people and products of rural and Aboriginal Australia that most world travelers have in mind.It also is worth remembering that this is more than an interesting oddity. Rather, it is an economic factor of considerable — and growing — importance. In 1992, international tourism injected nearly seven and a half billion dollars worth of foreign earnings into the Australian economy (Commonwealth Department of Tourism,1993b). This represented just over 10% of Australia's total foreign earnings making tourism one of the main magnets attracting overseas dollars (Australian Bureau of Statistics,1993). Tourism also is projected to be one of the most promising growth sectors for the Australian economy — and such rural-based activities as ecotourism are seen as key emerging areas of activity (Commonwealth Department of Tourism,1993a and Griffiths,1993a).

There is a common thread running through the aforementioned points about rural Australia. Whether one thinks about the interests that metropolitan Australians have in non-metropolitan Australia as a place of short-term renewal or long-term residence, the economic importance of rural Australia in the burgeoning areas of cultural exports and international tourism, or the determination of rural people to stay where they are (even in the face of adversity), the need to safeguard rural Australia's amenities — physical and social — is obvious.

Much of *national* importance depends on the success of efforts to protect the environmental assets of rural Australia, as well as to enhance the institutions, services and economic opportunities needed for rural communities to both survive and thrive. Rural Australia and rural Australians are anything but peripheral to the nation's welfare today, and all indicators suggest they will remain central to the nation's future.

More Mischief-Making Myths and Misconceptions

From a hard-nosed economic perspective, it makes sense to protect the rural goose that continues to lay so many of Australia's golden eggs. But, if the object of one's protection and assistance is improperly understood, the help one provides may end up doing more harm than good.

Beyond the myth that rural Australia is the nation's weak periphery, there are other, equally damaging misunderstandings in need of correction. Chief among these is ***Myth #2: Farmers and farming communities are the alpha and omega of rural Australia.*** Say "rural Australians" to most people and the first thing that pops into their mind will be "farmers". Most government officials also behave as if this common word association — this tendency to treat "rural" and "farm" synonymously — had the weight of reality behind it. It does not. While virtually all Australian farms are rural, the converse is not true. All rural places are not farms, nor are all rural Australians farmers.

Farms, farming and farmers are very important to rural Australia and figure prominently in rural life. However, they no longer are even close to being the beginning and end of Australian rurality. Consider the following facts:

First, by any measure, farmers are only a small fraction of Australia's rural population. Because of the ambiguity surrounding the definition of both "farmer" and "rural", there is a startling range of figures one legitimately can extract from the available data (Garnaut,1993; Williams,1992).[4] The most conservative analysis of the data suggests that less than 4% of Australia's rural population should be classified as farmers.[5] Even the most generous interpretation of the data indicates that no more than 17% of *rural* Australians are farmers.[6] Thus, somewhere between 83% and 96% of rural Australians are *not* farmers.

Second, farmers no longer produce the top export-earning products coming from rural Australia. Contrary to popular belief, wool, wheat and meat are no longer Australia's most valuable exports. These historical mainstays of the nation's export economy have been surpassed in recent years by other rural commodities. In 1992, for example, the exported goods generating the most foreign sales for Australia were coal and gold. Coal exports, in fact, raked-in twice as many foreign dollars during that year as the leading agricultural commodity (Commonwealth Department of Foreign Affairs and Trade,1993).

As a sector of the economy, agriculture still outperforms mining in terms of export earnings. However, its traditional dominance is waning, while both mining and tourism steadily are increasing their shares of foreign earnings. The continued strength and growing diversity of rural Australia's contributions to the nation's balance of trade is, of course, a healthy trend. There is strength in economic diversity.

Third, the vast majority of Australia's rural communities have their economic foundation in something other than farming. The myth that "rural" and "agricultural" are synonymous effectively has blinded both the public and policymakers to the extraordinary diversity of Australia's rural economies and communities. Agricultural communities are diverse in their own right. Think about what it would mean to live and work in a tropical, sugar cane growing area of northern Queensland versus an temperate, England-like apple growing community in Tasmania — or in the genteel wine-producing settlements within South Australia's Barossa Valley versus a harsh and dusty Northern Territory cattle station — or in the vast, barely-populated wheat belt of Western Australia versus the clustered little Victorian market-garden towns within commuting distance of Melbourne.

All of these places are rural — indeed, all of them are agricultural — but they encompass a real breadth of types of communities, lifestyles and amenities. Policies and programs that, in essence, treat them as identical and interchangeable "farming areas" miss the mark and are likely to fail.

Although the diversity among agricultural areas is substantial, it pales in comparison with the spectrum of settlements that are home to the lion's share of rural Australians. The economy of individual rural communities usually is dominated by one or two industries (and sometimes by just one or two employers). Thus, it is fair to say that the economic base of a specific rural place is likely to be narrow and the employment opportunities shallow (Powell, 1985).

In aggregate, however, the wealth of rural options is impressive. As Table 2 indicates, one can find communities across rural Australia where the economic base is something other than farms.

Table 2

Examples of the Non-Farm Economic Base of Australian Rural Communities

ski resort
Aboriginal development program
a corporate-owned natural gas field
a fleet of small fishing boats
hunting
the beach "shacks" of urban Australians
a utility-owned coal mine
the salaries of long distance commuters
public welfare payments
a scientific research facility
a national park or nature reserve
breeding and training race horses
harvesting and replanting forests
marine aquaculture establishments
transportation/communication facilities
public health and education services

pulp and paper mill
military base
a university
a prison
fruit juice factories
an abattoir
ecotourism services
a tropical island resort
furniture making
individual opal mines
a large smelting plant
a religious retreat
arts and crafts
a goldfield
owner-operated shops
retiree wealth/income

The diversity among Australia's rural communities and rural economies is nothing short of staggering. These idiosyncratic communities don't always have a lot in common, regarding who resides in them, how they operate as "communities", and what sorts of external assistance they want and need.

They all are rural, but the common denominators are more elusive than they might at first appear. In many respects, the capital cities of Australia are more alike — and easier to deal with as a group — than are a traditional Aboriginal tribal enclave in Arnhem Land, the frontier opal mining town of Coober Pedy, and a long-range commuter/hobby farm community in the Adelaide Hills (to take a slice down the nation's centre).

What one *can* state with certainty is that the reality of rural Australia is far more complex and diverse than the stereotypic images of farming communities. This chasm between what rural Australia is, in the popular imagination, and what it is, in fact, would have only moderate significance were it limited to what the public happens to believe.

For instance, what great harm is caused by the New South Wales agricultural newspaper, *The Land*, proclaiming itself to be "The Big Rural Weekly"? Its detailed coverage of farming news and anti-Labor political affairs may not actually speak to (or for) the majority of this state's rural and non-metropolitan citizens, but so what?"

The deeper problem is that the myth of "rural" and "farm" as synonymous terms also has guided the legislative, policymaking and program development activities of Australia's leaders across all political parties and factions. This unfortunate consensus among the nation's leaders has been crystallized in **Myth #3:** ***Whatever is best for the agricultural industry is the same as what is best for rural Australia and rural Australians as a whole.***

The reality that most people agree with this idea doesn't make it true. The point already has been made that most rural communities have an economy based on something other than farming. This is reflective of the fact that, over the past fifty years, there has been a profound decoupling of Australia's agricultural economy from its rural economy. Thus, for example, the fate of Australia's wheat farmers is of no more consequence to the residents of a rural retirement community on the coast of Southern Queensland, than it is to the residents of a suburb of Sydney.

This helps explain why the "rural crisis" trumpeted by the media and by farmers' organizations is not having the cataclysmic impact across rural Australia let alone the nation that one might expect. Were the farm economy and rural economy indistinguishable, then one quite reasonably would have expected the nation's agricultural troubles to have had a monumental "domino effect" on the rural economy. Were huge numbers of farm families actually being driven off the land and were most rural businesses collapsing in their wake then a massive rural-to-urban exodus should be well underway by now.

This has not happened. On the contrary, rural Australia, as a whole, has *gained* population in recent years (Salt,1992; Walmsley & Sorensen, 1993).

A look at the key area of employment reveals that the agricultural economy and the rural economy do overlap, yet remain distinctly different entities. The simple fact is that most rural people like most urban dwellers are employed in fairly universal, service occupations. For instance, there are a lot more rural Australians who earn their living by repairing automobiles, preparing/serving food and beverages, teaching students, working in stores, or doing office work, than there are rural Australians who derive their livelihood from mining opal, catching crustaceans, conducting research on rainforest flora, leading tourists on camel treks across the Outback, or serving as one of the Flying Doctors (Lewis,1990; Powell,1985).

As is true internationally, there is a greater proportion of rural Australians than of city-dwellers who are self-employed, or who are owner/operators of small businesses. But, again, most rural enterprises are not farm dependent.

Farmers are nearly as minor a part of the rural workforce as they are of the rural population. It is still true that some non-farm, rural jobs are largely dependent on the farm economy (e.g., abattoir workers, farm equipment dealers and agricultural extension agents). It also is the case that a substantial number of non-farm jobs are partially dependent on the farm economy (e.g., a roadside restaurant having many farmer-customers).

Agriculture remains a tremendous generator of jobs. It does so through a powerful employment multiplier effect. The raw agricultural commodities leaving Australia's farms create the need for a whole host of people to work on various aspects of their processing, distribution and sale. However, one distinctive feature of the Australian economy is that most of the jobs that agriculture creates "downstream" from the farm are not jobs that go to *rural* Australians (Commonwealth of Australia,1988; Walmsley & Sorensen,1993).

Unfortunately for the Australian economy, most agricultural products leave its shores as bulk, minimally-processed commodities. Thus, the greatest share of the processing, distribution and sales jobs attributable to Australian agricultural goods actually end up going to workers in other nations. This aggravating fact is what drives policymakers and experts across the political spectrum to push hard for Australia to get more deeply involved in the final processing and marketing of its own agricultural commodities. Accordingly, "value-adding" and "niche marketing" have become, with more than a little justification, the mantras of Australia's agricultural officials.

Moreover, the lion's share of non-farm, agriculture-generated jobs *within* Australia are held by metropolitan workers. From employees in the shipping business and factory workers producing Australian food and fibre products, to university-based agricultural economists and capital city-based public servants responsible for farm programs, it is city folks who have the biggest employment stake in the well-being of Australian agriculture. Rural Australians, meanwhile, are left to "suck hind teat", in terms of both the quantity and quality of existing non-farm, agriculture-generated jobs.

LIVING WITH A DE FACTO RURAL POLICY

Despite all of these realities, the myth continues unabated that the well-being of the farm economy and the rural economy are inextricably linked. The perpetuation of this myth, in turn, has led to the situation in which farm policy is *de facto* rural policy. A few examples should suffice to underscore how pervasive this nonsense is today.

First, year after year, hundreds of government, industry, and academic research reports and statistical analyses are churned out about the farm industry and agricultural economics. Yet, there is not even one Australian report that, in a serious and systematic manner, describes or analyzes out the future prospects for Australia's rural economy. No one even has bothered to calculate the total rural contribution to Australia's GDP. Thus, the great majority of rural people, rural jobs, rural economies, and rural communities — those *not* reliant upon farming — remain invisible and ignored.

Second, there is no comprehensive Department of or Minister for Rural Affairs at the state or national level. Needless to say, every state and territory has a Department of Agriculture, while the Commonwealth has the Department of Primary Industries and Energy. National attention to, and policy for, rural Australia and rural Australians is not channeled through the Department of the Prime Minister and Cabinet as is the case with other such cross-cutting constituencies, such as women (Commonwealth Department of the Prime Minister and Cabinet,1988). In fact, the standard practice is not to treat rural people as any kind of constituency at all.

When Commonwealth bodies want advice on rural matters, their long-established habit has been to call on the National Farmers' Federation, other national agricultural organizations and/or the state counterparts of these groups. Without a second thought, these industry associations are presumed to represent the needs and interests of a very broad and diverse geographically-defined population — only a minority of whom have any direct connection to their industry! It is as if governments developed their full range of urban policies and programs in consultation solely with an association of metropolitan-based durable goods manufacturers.

The Commonwealth's own "rural policy" team is buried in one of the eight units comprising one of the seven groups into which the Department of Primary Industries and Energy is divided. Again, an industry ministry is presumed to be able to represent the interests of a *geographic* constituency largely unconnected to this industry. The 60 staff members (out of more than 4,000 permanent, full-time DPIE employees) assigned to look after the broad interests of rural Australia approximate the number assigned to look after DPIE's own internal personnel matters (Commonwealth Department of Primary Industries and Energy,1992b).

Ironically, more than 90% of the staff and budget even of DPIE's Rural Division is allocated to activities fundamentally focused on farmers and farming (Commonwealth Department of Primary Industries and Energy, 1992b). Predictably, the main external bodies connected to DPIE's Rural Division are the Agricultural Council of Australia and New Zealand and the Australian Soil Conservation Council. At least DPIE thought to create such a unit. At the moment, no other Commonwealth agency has taken the step of establishing even a token rural affairs/rural policy/rural programs office.

Third, by default as much as design, the Minister for Primary Industries and Energy is the *de facto* Commonwealth-level public policymaker and governmental spokesperson for rural Australia. The current Minister, like nearly all his predecessors, apparently has not found rural development or rural policy (broadly defined) of much interest or importance.[12] Despite having had this portfolio for a few years now and having found the time, energy and desire to deliver numerous speeches on agricultural policy and to advocate multiple major policies for the primary industries the Minister has not brought forward a single major statement, policy or address broadly focused on the problems and prospects of rural Australia.

The most disheartening fact here is that this Minister is not at all atypical in the extent to which he equates the health of the agricultural industry with the overall well-being of rural Australia and rural Australians. Previous Government statements on rural policy have displayed a similar fondness for this myth (Australian Labor Party,1993; Commonwealth of Australia, 1986). And, although it hardly seems possible, the Government's main political opposition, the Liberal/National Party Coalition, routinely expresses an even more narrow, agriculture-oriented view of rural society and the rural economy.

Fourth, and finally, even strong critics *of both* the Government's and the Coalition's agricultural policies display an unfortunate tendency to reinforce this underlying myth. One clear example can be found in Geoffrey Lawrence's provocative book, *Capitalism in the Countryside: The Rural Crisis in Australia*.(Lawrence, 1987) The breadth of vision promised by the title is not realized in the substance of the document.

Lawrence has written a very pointed and well-argued critique of Australian agriculture. However, he has remarkably little to say about the problems and prospects of the majority of rural citizens, rural communities and rural economies that do not revolve around agriculture.

This fundamental confusion between "rural" and "agriculture" has become so widespread — not only in Australia, but also in the other OECD countries — that the OECD itself was prompted to comment:

> Rural economies have undergone a paradigm shift that public policy so far has been slow to grasp. Failing to understand and accept the fact that future viability for rural areas cannot come from the agriculture sector alone diverts attention from more productive, longer term approaches to promoting rural vitality through rural development policies designed explicitly for that purpose. It leads to unrealistic expectations for agriculture policy reform, which is a barrier to its adoption. To the degree that public spending on agricultural policy is intended to promote the well-being of rural areas rather than sectorial purposes, much of it will be used ineffectively or create additional distortions in agriculture in a vain attempt to address broader economic development needs. Only broader, more forward looking rural development policies with an appropriate role for agriculture can assure a better rural future. (Organisation for Economic Cooperation and Development,1991a)

'CAUSE THEY'VE ONLY GOT EYES FOR EWE

There appear to be four explanations for the stunning consensus in support of the myth that whatever is good for the agricultural industry is one and the same as what's good for rural Australia and rural Australians:

First, earlier in Australia's history, there was considerably more truth supporting this belief than is the case today. Conventional wisdom doesn't fade quickly, even when it is revealed to be more conventional than wise!

Second, the agricultural industry is organized, politically powerful, and coherent in its demands to a degree light years beyond that of the diverse, idiosyncratic "silent majority" of rural Australians. Unsure of the common denominators that would allow them to become a meaningful constituency in political terms, lacking articulate and influential advocates, and bereft of means of communicating effectively across the various physical, social, economic, political, and occupational distances that separate them, this unorganized mass of non-farm rural Australians is unlikely to supplant the agriculturalists' dominance anytime soon.

Third, these circumstances combined earlier this century to create a formidable government/industry/institutional alliance focused entirely on agriculture. Australian leadership positions that include rural portfolios are occupied (or guided) virtually exclusively by people whose training, socialization and worldview have been in agriculture and related disciplines, whose experience is in agricultural affairs, and whose rise to the top has been fostered by their mentors/colleagues within Australia's agricultural alliance. Accordingly, the leaders emerging from this alliance quite naturally adopt its assumptions, conventional wisdom and traditions.

This is not evidence of a conspiracy in any malevolent sense. It merely confirms that Australian agriculture, like most other spheres of human endeavor, is structured to ensure its perpetuation. Why do these leaders look out at rural Australia and see only agriculture? For the same reasons giving rise to the maxim that, "when your only tool is a hammer, every problem looks like a nail"!

Finally, there is one additional factor that encourages the perpetuation of the agriculturalists' dominance. Put simply, adopting a broader view of the rural economy and rural society will dramatically complicate the tasks facing researchers, politicians, and public servants. The job of maintaining a thriving agricultural sector in Australia already has proven difficult enough, even for very competent and committed state and national leaders. Figuring out the more complex rural economy and creating a sensible strategy for its development seems like something best put in the "too hard" basket.

Why borrow all the trouble inherent to the task of creating and implementing policies and programs that really *will* be of assistance across the remarkably wide spectrum of rural people, economies and communities? And, especially, why do so when there is no demand (in political terms) for making this transition — and when the clearest short-term effect will be to threaten the status and power of your friends and colleagues throughout Australia's well-established agricultural alliance?

Seen in these terms, there are strong reasons to perpetuate this myth and to limit one's view of rural life to the agricultural industry. The problem is that before too long the realities of rural Australia — and the discrepancies between these realities and the agricultural alliance's mythology — are going to become inescapably apparent.

Perhaps a specific example will bring this general point into sharper focus. For several years, the Government has been operating a program named the Rural Adjustment Scheme (RAS) which was designed to respond pragmatically to those businesses hardest hit by Australia's continuing rural crisis. The basic thrust has been to help beleaguered rural businesses keep from going under through the provision of special grants, loans, counseling, and other forms of assistance. This would buy time to weather temporary adversity beyond their control, and to make the changes that would put these enterprises on more solid financial ground. If a business' woes proved more profound or permanent, then RAS would be there to help them close their businesses, liquidate their assets and get re-established elsewhere. It is the kind of helping hand any rural business owner ought to appreciate in times of trouble.

Unfortunately, the Rural Adjustment Scheme is not available to most rural businesses in the shadow of bankruptcy. It is available only to farmers. Even the owner-operators of farm-dependent businesses such as the local farm supply store, or the area abattoir are excluded. They may, in objective terms, be victims of exactly the same adverse economic forces as farmers, but they need not bother applying for assistance from RAS. Needless to say, all non-agricultural, rural business owners are left high and dry, too. Although, like their farming neighbours, they find themselves saddled with business debt, coping with adversity not of their own making, and facing the loss of their capital/enterprises, their income source, their homes, and their established way of life, *these* rural people have no access to the benefits of this, or any equivalent, "adjustment" scheme.

The point is *not* to stop helping farmers. Australia has a vital national interest in their well-being that far exceeds the sheer number of farmers. Rather, we merely are pointing out the peculiar blindness — and injustice — of government policies and programs based on the misconception that assisting the nation's rural population can be accomplished solely by aiding Australia's farmers.

The non-farm majority of rural people eventually will have had enough of this sort of discrimination. They cannot be counted on to suffer in silence forever. Just as 19th century scientists had to jettison their old conception of mammals in the face of the truth that the platypus was not just a taxidermist's trick so, too, Australia's 21st century leaders will have to cast aside the traditional vision of rural Australia in the face of the truth that all those diverse, non-agricultural, rural people, places and economies are not just a statistical illusion.

UNANSWERED QUESTIONS

What might replace the traditional vision of rural Australia? What will the nation's rural economy, and rural society, look and act like in the decades ahead? Whose vision will be given the greatest credence and thus, attract the lion's share of available support? Who will be responsible for attempting to bring the positive visions of rural Australia to successful fruition? What will they require to help rural Australia move from where it is today to where it could, and should, be in the future? Who will be the winners and losers in the process of rural change? And, perhaps most importantly, to what extent can Australians actively choose to exercise control over their own destiny in these matters, rather than merely reacting to and coping with the market influences and other forces beyond anyone's (or any nation's) direct control?

These are the big picture questions that have been left largely unaddressed, and certainly unresolved, in Australia today. (Lawrence, Gray & Share, 1989) There is not even a consensus about such basic issues as whether Australia's national interests are best served by many more (or many fewer, or about the same proportion of) people living and/or working in rural places.[13]

Australia, like most other OECD countries, does not have an explicit rural policy of this sort (Commonwealth Department of Primary Industries and Energy,1993b). In other words, it does not officially care where the nation's population distributes itself along the Outback to inner city continuum (National Population Council,1991).

Australian governments have avoided a broad population distribution policy, in part, out of concern about how to actually achieve whatever goals might be set and, in part, because such a policy would smack of the worst sort of social engineering. However, the absence of an over-arching policy for rural Australia has not prevented governments from having a profoundeffect on the country's rural people and places.

Indeed, it would not be overstating the case to say that the cumulative impact of government attention/inattention, and action/inaction in relation to rural Australia has shaped the current reality as much as climate, geography and "the market". Governments, at all levels, can choose to be officially neutral about — or simply ignore — fundamental rural issues. What governments cannot do is make themselves irrelevant to questions of rural survival, growth and development.

Australian governments even without an explicit rural development policy to guide or coordinate their actions have sculpted the current shape of rural Australia through the use of three powerful tools. The fact that these three tools are so familiar, and so taken for granted, that they hardly are visible doesn't render them any less potent and pervasive in their impact. The governmental tools to which we refer are industry support, government income, and social policy.

Industry Support

As discussed earlier, government policy for an economic sector (the primary industries, particularly agriculture) has become the *de facto* policy for a population sector (rural Australia). The direct price supports Australia provides for primary commodities have diminished markedly in recent years, and are slated to drop even more. This is the visible edge of public policy, around which public debate usually revolves.

What often gets overlooked are the massive public expenditures made over the years in support of the primary industries. Many of these expenditures fall into the category of infrastructure development. The nation's publicly-financed railroad system was not developed so that tourists could take a peek at Outback scenery, but rather to facilitate the transport of publicly-subsidized primary commodities to the publicly-underwritten port facilities from which they could be exported. The same largely could be said of the nation's network of rural highways and bridges.

These extensive public investments were designed to increase the efficiency of the primary industries and to enhance the already-enormous foreign earnings these industries generated for the nation as a whole. Obviously, however, governmental outlays in support of the physical infrastructure required by these industries have had wide-ranging side effects on Australia's rural development. For instance, they have made it feasible to reside in a rural area, while being employed in an urban labour market. And, they certainly were a key factor in determining the precise location of most rural and remote centres.

Beyond direct subsidies to producers, and even beyond the creation and maintenance of the physical infrastructure, Australian governments have supported primary industries in a host of other ways. These range from favourable tax legislation/regulations, to the large public allocation for all the research, education and training programs across Australia serving the primary industries. The public purse also is used to pay for urban-based officials who inspect farm products coming into Australia, mediate industrial disputes that could adversely affect the primary sector, and serve as advocates for the primary industries in international forums.

While not designed as a broad rural development policy, all this public support of the primary industries has, inevitably, had spill-over effects on the rest of the rural population. Few rural areas are untouched by such aid.

Government Income

The number, and diversity, of rural Australians who actually are dependent on the public sector for the bulk of their income is surprisingly large. Included here, especially in the last three groups below, are some people who pride themselves on their "rugged independence" and who might be inclined to look down their noses at those who "feed at the public trough".

The first group of people who derive most of their income from the public sector are the recipients of government transfer payments. This includes individuals who depend on unemployment benefits, workers' compensation, family/child support payments, AUSTUDY, assistance to the physically or mentally disabled, the Farm Household Scheme, special Aboriginal grants/subsidies, or any other form of public welfare, to make ends meet. People in this group are widely dispersed across the country. In aggregate, however, they represent a significant population within rural Australia.

The second group includes all retired people getting a major portion of their total income from government pensions. Retired public servants who draw the relatively generous benefits of government superannuation schemes play a major part in the growth of rural retirement communities.

The third group is made up of all rural Australians who are on the public payroll. From military personnel to Aborigines working under the Community Development Employment Projects Scheme from health care workers to young people employed through the Australian Traineeship System from university/TAFE staff to unemployed people taking advantage of the New Enterprise Incentive Scheme and from government bureaucrats to police officers and park rangers, there is a very wide spectrum of people paid from the public purse. One would be hard-pressed to find a rural community without public employees of one kind or another. Conversely, there are some rural places (e.g., with a military base) where public employees outnumber any others.

The fourth group comprises all the small business owner/operators and workers whose livelihoods are dependent upon the three aforementioned groups. It is commonplace to view an agricultural supplies dealer as being dependent upon local farmers. Yet, it is rare for anyone to acknowledge how tightly their job or business is linked to government spending. Nevertheless, were government pensions, payrolls and payments to disappear tomorrow, a broad cross-section of "independent" rural businesses and rural jobs would disappear along with them.

A revealing example can be found in those areas of northern Australia having a large population of Aborigines. There is a considerable segment of the Australian public (including more than a few politicians) who resent government spending on Aborigines.[8] Few of these people understand how vital such spending is to the overall economy of the nation's top half. Most public money given to Aborigines flows quickly, and profitably, to non-Aboriginal business owners/employees (Crough,1993, Hudson & Jensen,1991 and Hudson,1991). Thus, these non-Aborigines also legitimately can be counted among the prime beneficiaries of all the dollars ostensibly "wasted" on Australia's indigeneous people.

Social Policy

A notable characteristic of Australian society is its widespread, genuine support for the ideal of giving all citizens "a fair go". Australian social policy has reflected this ethos and has tried to provide a wide range of subsidies and services to all citizens.

While the Australian "welfare state" is neither as extensive nor as generous as some of its European counterparts, it is far more pervasive and fulsome than the American model. Few Australians have failed to benefit in real and important ways from the nation's massive network of social programs, policies and funds.

This egalitarian impulse also has been codified by the Labor Government over the past decade as "the social justice strategy" (Keating & Howe,1992). This strategy, predictably, has attracted intense criticism from both ends of Australia's political spectrum. While giving everyone "a fair go" remains a widely-held ideal, even the Labor Government's most enthusiastic advocates could not mount a credible case that this strategy has resulted in Australia becoming a truly egalitarian society.

Despite this caveat, the fact remains that Australian governments always have gone a long way toward treating their rural citizens in an equitable manner.[9] As noted earlier, the main rural industries have received ample public support, while rural Australians have been the recipients of their fair share of government-supplied income. The protections and privileges seen as the entitlement of every Australian citizen have not been denied to those living far afield from the nation's population centres.

Accordingly, rural Australians have access to a breathtaking array of governmental programs, services, sources of information, and assistance. It takes a 221 page user-friendly guide, published and widely distributed free of charge by the Government, merely to catalogue all that is available (Commonwealth Department of Primary Industries and Energy,1993b).

Rural advocates correctly note that even with all these public services and subsidies, rural Australians do not have as good a deal, as extensive a range of social, educational, cultural and economic opportunities, or as secure a safety net beneath them as is the case for their metropolitan cousins (Cullen, Dunn & Lawrence,1990). In international terms, however, Australia has taken care of its rural citizens as well as all but a small handful of other nations.

Health care is a good example of the seriousness with which Australian governments have attempted to ensure that all individuals will have access to reasonable care at a reasonable cost — even if those individuals happen to live in small, poor, or remote corners of the countryside. Rural people participate fully in Medicare, the Pharmaceutical Benefits Scheme, and the Sickness (income) Allowance.

In addition, governments underwrite travel assistance for rural patients, special training and assistance for rural general practitioners, the provision of health care centres across rural Australia, the Royal Flying Doctor Service (including fully-stocked medical chests provided free to isolated people), plus a long list of special subsidized services available to rural women, Aborigines, and people with specific disabilities. Is this system perfect? Of course not. Major problems persist such as the shortage of rural doctors. Still, it represents more than a token attempt to assist rural Australians in dealing with their health care needs.

What Australian governments have done with the aforementioned tools is to make rural living an increasingly attractive alternative. Persistently high levels of metropolitan unemployment, the declining quality of city life, and the absence of affordable urban housing all have diminished the "pull" side of migration to the capital cities. At the same time, having access to a spectrum of government benefits, while enjoying all the rural amenities, has weakened the "push" side of the rural-to-urban migration equation.

Beyond any doubt, what governments do (or refrain from doing) affect rural Australia and rural Australians in powerful ways. For a telling example of the impact of the public sector on rural development even in the absence of any official rural policy one need look no further than Canberra itself. Prior to the creation of the Australian Capital Territory earlier this century, the rural area between Queanbeyan and Cooma was fairly typical New South Wales bushland. It wasn't the climate, the landscape, the existing transport system, the physical infrastructure of the area, or the "invisible hand of the market" that dictated this was the capital city Australia "had to have". Rather, it was a political decision that transformed this area from sparsely-populated countryside into Australia's sixth largest population centre in less than half a century.

The creation of the Australian Capital Territory had virtually nothing to do with an explicit desire to promote rural development in this part of the country. And yet, this one governmental decision profoundly and permanently altered the economy and society of an entire region. The final irony, of course, is that the net effect of this development was to transform a previously rural area into a metropolitan one!

As was the case in the creation of the Australian Capital Territory, rural development in Australia has been the residual consequence — and the inadvertent by-product — of policies and actions designed with other purposes in mind.

Governments did not finance support for Australia's primary industries, or provide income support to its rural citizens, or extend its social policies to the countryside because these governments had some coherent, comprehensive rural development goals in mind. Rather, they took these actions because, on the one hand, they wanted to reap the rewards of strong primary industries, and, on the other hand, they felt a responsibility to give their citizens, irrespective of location, a fair go.

Will this combination continue to be good enough as Australia heads into the 21st century? Should Australia be content with this *de facto*, dual-track rural development strategy of first, and foremost, doing everything possible to strengthen the primary industries (especially agriculture) — and then, counting on social policy measures to mop up whatever spill-over problems and gaps this industrial policy may leave in its wake? More than a few of Australia's leaders would advocate that this is precisely the course to pursue. They would argue that this combination has worked pretty well so far and that, "if it ain't broke, don't fix it".

THE REAL RURAL CRISES

We disagree. The current situation suggests to us that this combination of industrial and social justice policies is not sufficient to ensure a stable, secure and prosperous rural future. Why? Because, in a nutshell, they cannot solve the economic, employment/income and community problems facing rural Australians now — and looming even larger for the years ahead. Let's take a brief look at these problem areas.

ECONOMIC

Independent business owner/operators in Australia's primary sector — farming, fishing, forestry and mining — are accustomed to seeing themselves as the heart and soul of their respective industries. For example, Australian family farmers can be excused for believing that the nation's agricultural policies and plans revolve around them and that, for all intents and purposes, they *are* "the industry". It once was true.

Yes, the overwhelming majority of commercial farms in Australia continue to be family owned and operated.[16] Nonetheless, it would be more accurate to say that these independent, family farmers — like their counterparts in fishing, forestry and mining — *were* "the industry".

What these primary producers often fail to understand is that industrial policy no longer is premised on *their* well-being. Instead, there has been a progressive shift — by banks, other private sources of capital, government and industry leaders — toward backing *any* entity that can deliver the goods in terms of each industry's overall efficiency, productivity, export earnings and value-added output.

Just as governments officially are neutral on the issue of how the population is dispersed along the Outback-inner city continuum, so too, governments now officially are neutral on how the primary industries are dispersed along the owner-operator/transnational corporation continuum. *What governments and industry leaders care about above all else is the strength of the industry — measured in hard economic terms — not the well-being of the nation's traditional primary producers* (Hill & Phillips,1991; Lawrence,1987; Lawrence, Share & Campbell,1992; Williams,1990).

Officially, there is no bias against the traditional producers. Officially, governments, financiers, and industry leaders would be happy to see every current, independent owner/operator adjust successfully to the new realities of the primary industries. Officially, nothing would please them more than to have all the traditional Australian family farmers, fishers, foresters and miners transform themselves into a broad base of highly efficient, innovative, sophisticated, internationally market-oriented, value-adding, profitable primary producers. Realistically, however, they are not holding their breath waiting for this transformation to occur.

But, if only for old time's sake, they are prepared to lend a helping hand. Witness, for example, the new initiatives recently introduced by DPIE such as the Primary Industries Marketing Skills Program and the Rural Industries Business Extension Service.[17] These are aimed at assisting primary producers who have gotten the economic message that they need to go beyond selling the "old reliable" commodities in bulk, unprocessed form, if they are to survive and thrive in the changing world marketplace.

The political message implicit in these new initiatives is that Australia's traditional primary producers *are* being given a fair go to structurally adjust, — to learn how to hit the new (moving) targets awaiting them in the rough and tumble world of international trade. The other implicit message is that, having been given this fair go, local owner-operators in the primary industries will have only themselves to blame if they cannot secure a stable and profitable niche in the new economic world order. Even so, humanitarian aid in the form of such mechanisms as the Rural Adjustment Scheme and Farm Household Support is made available to cushion the blow for those (farmers) who just don't have what it takes to win in the new primary industries game.

In essence, there has been an abrupt and radical decoupling of the fate of Australia's primary industries from the fate of Australia's traditional primary producers. The day is fast approaching when Australia will confront the ironic twin reality of (a) record profits/export earnings from the agricultural sector and (b) record numbers of family farmers and farm-dependent businesses going down the gurgler (Kingma,1985; Lippert,1993).

This decoupling is a principal cause of the real rural crisis in Australia today. Primary producers always have had to endure unfriendly acts of nature, unwelcome increases in their costs, and unfortunate downturns in commodity prices. Everyone understands and accepts these inherent risks. But, through countless hard knocks and cyclical crises, Australian producers could count on their governments and their financial institutions to help them persevere. Those days are gone. Neither the public sector, nor the private financiers, (nor even their own industry leaders) have the interests of these local producers at heart anymore.

For generations, Australia's traditional primary producers have been supported through thick and thin and have basked in the warm glow of privileged treatment. Suddenly, they have to cope with the unprecedented economic hardship, and the psychological pain, that accompanies the realization they have been left out in the cold. Mouse plagues, droughts, price collapses, Mabo-related scares, and unfair foreign competition are only insults compared with the underlying injury of this decoupling.[18]

This profound shift has not occurred because policymakers, bankers, investors, and industry leaders suddenly started to take great pleasure in making traditional primary producers squirm. Rather, it happened because these people made five basic judgments — and because they had the combined power to turn these following five judgments into the new status quo.

- That changes in the international market for primary goods are structural rather than cyclical and thus, to simply conduct business as usual and wait patiently for better times is to live in a fool's paradise.
- That the future will belong to those who are clever, flexible, well-resourced, strategically-placed, vertically-integrated, aggressive and market-oriented enough to deliver top quality, competitively-priced, value-added primary products to increasingly demanding and disloyal customers around the world.
- That while some of Australia's traditional primary producers are capable of competing successfully in this new world economic order, most are unlikely to make the necessary adjustments.
- That the combination of scientific advances (e.g., in the area of biotechnology) and corporate investors — especially foreign ones — interested in Australia's primary sector make it feasible to derive more profits and export earnings from fewer and larger foreign-connected primary production units.[19]
- That, therefore, it would be irrationally sentimental, and counter-productive to Australia's public and private sector interests to allocate already scarce resources — or to waste precious time — on maintaining traditional primary producers whose decline and/or disappearance is all but inevitable.

Thus, Australia is moving into an era when it is more than hypothetically possible for these rural industries to flourish without the traditional farmers, fishers, foresters and miners — let alone the majority of other rural people — reaping a major share of the rewards. As a consequence, the responsibility for looking after many traditional producers will shift away from industry-related bureaucracies and toward social welfare agencies[20]

There is plenty of anger and a fierce sense of betrayal among those hardest hit by the current situation (e.g., farmers in the inland sheep/wheat belt.) They blame their governments both for making them the only unprotected ones in the rough waters of commodity exporting, and for abandoning them when the unfair trade practices of other nations began to drown them; their bankers both for seducing them to borrow heavily and for then choosing to force a debt crisis instead of sticking with them; and foreign investors and transnational corporations (both for being the sirens luring Australian governments and financiers away from their traditional rural partners, and for setting the groundrules for international trade in ways that severely disadvantage some Australian primary producers).[21]

No matter the extent to which this apportionment of blame is well-placed, the practical question remains: "So, what?". The chances of a return to "how things used to be" for Australia's primary producers appear to be nil. There is a potent consensus among the main political parties and the key private sector leaders in favor of the aforementioned "new status quo". Moreover, even if Australian policy miraculously shifted back next year, it is not clear that the economic genies already released would obligingly go back into their bottles. The anger is real — and really understandable — but it is not likely to undo the structural changes now in place.

Many primary producers have, thus far, been either unable or unwilling to read this economic handwriting on the wall. For some, this is a function of the fact that they have not yet been adversely affected by the new regime. Although it doesn't get much media play, many primary producers still make a good living from their particular kind of farming, fishing, forestry or mining. Thus, it is very misleading to claim that all Australian primary producers have been shafted, or that they all are in dire financial straits.

Real life, as usual, offers a more complex story. Whether — and, if so, for how long — these successful primary producers will continue to do fine in the new world economic order remains unclear.

However, the tough times already have arrived with a vengeance particularly for many farmers in the inland sheep/wheat belt. Some have adopted a variety of coping strategies primarily by cutting back expenditures and/or seeking supplementary employment (Gray, Lawrence & Dunn,1993). Others are scrambling to figure out a new niche for themselves in their changing industries.

Most traditional producers are getting poorer and some, in Australian terms, have become impoverished (Australian Catholic Bishops' Conference,1992; Davidson & Lees,1993). And yet, given the harsh realities of their current status and future prospects, surprisingly few actually have left the ranks of active primary producers.[22]

What will happen from here is a matter of speculation. The most likely scenario is one in which most categories of mainstream primary production will become much larger scale and even more capital-intensive, technology-driven, corporately-controlled, and internationally-connected (Crean,1992; Kingma,1985; Lawrence,1987; Newton,1993;Walmsley & Sorensen,1993).

Fishing and forestry are likely to become more like production agriculture, with large-scale cultivators (rather than "hunter/gatherers") becoming the key primary producers within these industries. What real chance do Bruce and Sheila with their little trawler have against a major network of Japanese-financed fish farms? Similarly, what hope does the Armstrong family with their woodlots and chainsaws have of succeeding in the international marketplace when their "local" competition is a huge tree farm that is a subsidiary of the American XYZ Corporation? These "Aussie battlers" may be the sentimental favourites, but everybody knows where the "smart money", and the governmental support, actually, will be vested.

Meanwhile, agriculture itself probably will become more like mining. A relatively small number of huge, internationally-financed producers will be responsible for the majority of production. New technologies — bio and/or mechanical — will displace a significant number of the people now employed in agriculture .(Buttel, 1991) As is currently the case in mining (a multi-billion dollar industry with a remarkably tiny workforce), the dollar value of output produced per person in agriculture may become astronomical.

After all, this is what happens when the level of production and earnings increases, while the number of human beings required to reach this level decreases. The wisdom of continually displacing labor is open to question, especially in an economy offering few new employment opportunities.

However, for a variety of reasons, it probably will not be the case that these changes will mean the elimination of all family farmers [illegible] It is more likely that an elaborate system of contract farming will evolve in which a corporation supplies all the inputs for, and buys all the outputs from, an individual farmer (who will continue to work, and often still own, the land).

Mining probably will be the least affected of all primary industries by the new world economic order. This is because mining is the rural industry that already has made the most profound transitions in line with the dictates of Australia's emerging strategy for the primary sector. Thus, more of the same appears to be the most likely path for the mining industry to follow.

One final point. Industries dependent on foreign investors and transnational corporations are obligated to export their profits, as well as their products. The leakage of these profits from the rural areas responsible for their creation removes a vital stimulus for the local economy. Such industries increasingly will decouple from the local economy in other ways, too — for example, by buying their inputs elsewhere and by adding value to their products wherever in the world they can get the best deal.

The aforementioned contract relationship between primary producers and major corporations may well become widespread, not just in farming, but in some areas of fishing, forestry and mining, as well. Being under contract to a major corporation does offer a substantial amount of income stability and security. This will comfort some producers, especially to the extent it strikes them as being the private sector equivalent of the role Australian governments used to play. However, such contracts inevitably entail a loss of independence. In fact, while absorbing many of the old risks, such contractees have more in common with an industrial "piece worker" than with primary sector entrepreneurs.

The reality that many traditional primary producers would rather adapt to this new regime than get out of their industry altogether will not surprise the corporations promoting the contract scheme. In fact, corporate leaders count on this tendency and use it to extract more favourable contractual terms from traditional producers.

Ironically and sadly, the bottom line from this economic overview is that the measures now in place to strengthen the leading industries of rural Australia probably will weaken the socio-economic status of rural Australians. They will *not* result in a net increase in rural, primary production jobs or income.

The new vision of primary industries coming into focus in Australia may, indeed, do wonders for the nation's foreign earnings and balance of trade. What it will not do is create a better future for the people and communities of rural Australia. Thus, it is a classic illustration of why even a "good" rural industries policy can be a rotten rural development policy.

EMPLOYMENT/INCOME

If industrial policy cannot be counted on to spark a rural rejuvenation, then how about the other half of Australia's *de facto* rural development strategy: the social policy agenda? The basic answer to this question is that social policy is concerned with the *distribution* of Australia's "pie" (e.g., income, jobs, services, amenities, access to opportunities) not with the *creation* of a pie big enough to ensure there really is plenty for everyone. Social policy cannot take the place of economic development.

A fair distribution of the current pie is a worthy goal. It's just not sufficient, in and of itself, to create a brighter future for rural people. Rural Australians are fortunate to live in a nation where they already do receive a reasonable share of what the society has to offer its citizens. As noted earlier, rural people, places and economies would be much worse off were the current flow of government-supplied income, employment and services to be cut off.

The fact that all these established benefits of Australian citizenship are geographically neutral has been the saving grace of a broad cross-section of rural Australians during the current recession. At the same time, it would be a bleak future, indeed, if the best rural Australians could hope for is to be long-term recipients of government assistance (or, at best, to be the public servants handing out these benefits). Questions of self-esteem aside, all these government services and payments combined are no more than a safety net keeping people from falling into the depths of poverty.

Social policies, programs and subsidies enable people to make meagre ends meet. They do not allow people to enjoy the standard of living to which most Australians would prefer to remain accustomed. Achieving, or maintaining, *that* requires people to be earning a decent income on a fairly regular, long-term basis.

Social policy cannot deliver this essential piece of the pie — a fairly good and stable job — to every rural Australian seeking one. It cannot do so because there are not enough of these jobs inside Australia's pie. This is one of its fatal flaws as a rural development strategy. The other flaw is that there is not enough money in the public purse to indefinitely sustain current social programs and subsidies, let alone to expand what rural Australians now receive.

The struggle in the countryside today is for rural communities to hold on to what they have in the face of intensifying pressures to retrench and rationalize (in other words, cut) the governmental services and benefits upon which rural Australians have come to depend. Many state and national social policies have served rural Australia well within the limits of their remit. However, it is unrealistic to expect them to constitute a rural *development* initiative, when rural *maintenance* alone is proving to be an increasingly difficult task (Collingridge,1991).

So, what we have here is a rural industries policy that isn't even *intended* to guarantee a better future for traditional rural producers — and that does virtually nothing to promote the interests of the majority of rural Australians whose livelihoods aren't dependent upon primary industries. This industrial policy is then combined with a set of social policies lacking the mandate, the capability, and the resources to do more than help rural Australians avoid the most debilitating consequences of the economic, employment, health and welfare problems besetting them.

COMMUNITY

There is one other fundamental deficiency in the idea of using the combination of industrial and social policies as a *de facto* rural development strategy. Put simply, neither policy area deals positively and appropriately with rural people and places *as communities*.

Primary industries policy concerns itself with the efficient and profitable functioning of an economic sector. Rural communities, as such, are largely irrelevant. They may be of tangential interest as the usual source of certain inputs (from consumable supplies to labour), and as the location of some required infrastructure (such as telephone exchange or a railroad depot), for the industry.

But, if the closest community is, or becomes, incapable of adequately performing these industrial support functions, the obvious priority is to secure alternative sources of support — not to get trapped in the quagmire of community improvement.

Social policy concerns itself with the equity and access problems facing Australians, both as individuals and as members of specific groups that governments have identified as being deserving of collective attention (usually because of past discrimination). Thus, there has been a dual emphasis on assuring all citizens a fair go and on "removing the barriers associated with race, gender, class and language" (Keating and Howe,1992). Rural people, per se, have not been a priority constituency within the Labor Government's official social justice strategy [illegible]

As with many things in life, Australian social policy's greatest strength (from a rural perspective) — namely, that the benefits of citizenship are available to *individual* Australians, no matter how small, unwealthy, or remote the place they reside may be — also is its major weakness. This is the case for three reasons.

First, as a rule, government assistance programs ameliorate the effects of problems on specific individuals, without addressing the underlying causes. Thus, for example, in a small community having 100 people unemployed because the local canning factory closed, all 100 will get their individual unemployment payments. Each also will be offered access, as individuals, to retraining programs.

Most of the jobs for which they are being retrained will be ones that exist elsewhere (usually in a major centre) — in the unlikely event these jobs exist at all! The assumption is that getting ahead means getting out. The resulting community decline is seen as an unfortunate, but inevitable, cost of promoting individual advancement. Whether community decline really is so "inevitable" has become a moot point. The deck is stacked to make this a self-fulfilling prophecy.

For, with the rarest of exceptions, social policies do not facilitate activities designed to help people suffering common setbacks to work together to effectively come to grips with the underlying social/economic problems afflicting them and their community. Neither is governmental intervention routinely designed to assist them to learn how best to work together as a community to improve their collective lot. In this way, government social programs tend to perpetuate the belief that people's problems are strictly their own (and the government's) concern and that the only sensible responses to these problems are individualistic ones. This set of beliefs and behaviours effectively undermines any sense that people are "all in this together".

Second, government social programs inadvertently have worked against community cohesiveness by segregating small, rural populations along the lines of eligibility criteria — and thus, atomising these little communities into disparate, rival "client groups". For instance, rural women get special breast cancer screening services, but there is no equivalent prostate cancer screening program for rural men. Aboriginal members of the community are offered lots of goodies denied to their non-Aboriginal neighbours. Migrant kids get free help to improve their language skills, but non-migrant kids with language difficulties have to arrange and pay for tutors. Ed Jackson, as a farmer, gets up to two years of income support, plus a generous "re-establishment grant" to help him cope with leaving the farm — but, Ed's brother, Bill, gets nothing when his farm equipment business goes bust and he has to sell his home to cover the business' debts. While there is a defensible rationale in each of these cases, the point is that, cumulatively, they exacerbate existing rural community tensions.

Third, the programs and payments through which many social policies become manifest have created a deep dependence on government assistance — even in that last bastion of rugged independence: rural Australia. Faced with escalating demands and shrinking budgets, Australian governments now are becoming enamoured with the idea of individuals and communities pulling themselves up by their own bootstraps.

It's going to be an uphill fight to sell this particular brand of "self-reliance" to a public long-accustomed to thinking that "it is the government's job to sort it out" when times get tough. Australia can take pride in the strength and comprehensiveness of the safety net it has provided in the past for its citizens. Dependency is nothing more than the other side of the same coin.[25]

One key problem is that governments too often provide what some refer to as "disabling help". To the extent that rural individuals see themselves both as helpless victims (of whoever, or whatever, is the villain) and as passive clients of the government, they will have lost much of their will and their skill to improve their own prospects.

The same is true at the community level. When rural communities buy into the individualistic, self-fulfilling negative prophecy mentioned earlier, they lose much of their motivation and their capacity to arrive at collective solutions to their common problems. Similarly, when rural communities depend primarily on governments, they lose the knack of depending on each other. In such circumstances, it doesn't take long for them to lose any meaningful sense of themselves as a community at all.

The point here is not that Australia's major social policies should be scrapped. The far-reaching web of social and educational programs, policies and payments genuinely have helped a tremendous number (and proportion) of rural Australians over a considerable span of time. In terms of its avowed mandate promoting equity in, and access to, the benefits of citizenship for all Australians — social policy has been a success.

However, from a rural development perspective, social policy has a dark side that only rarely is brought to light. It is relentlessly individualistic. It *does* undermine community cohesiveness. And, it *will* continue to foster more dependency on government than community self-reliance. Seen in this light, Australian social policy looks surprisingly anti-social.

Because of all these realities, the social policies now in place are no more capable of sparking a rural rejuvenation than Australia's current primary industries policy. Upon close examination, the combination of these two realms of public policy shows remarkably little promise of functioning well as Australia's *de facto* rural development policy. Consequently, we must conclude that rural development policy in Australia is broke and does need to be fixed — if not entirely reconstructed.

THE FOUNDATIONS OF RURAL RECONSTRUCTION

So, what *does* make more sense? As a starting point, Australia needs an explicit, powerful, and comprehensive rural development policy rather than continuing to rely on its odd amalgam of industry and social policies. We think rural development policy should give top priority to six goals.

Goal 1. A growing rural population base.

A significant net rural depopulation would be counter-productive to the well-being of both urban and rural Australia, and, thus, damaging to the national interest. Given this reality, official neutrality on the subject of population distribution serves no useful purpose.

It is neither possible nor sensible for governments to ensure that *every* rural community will increase or even maintain its current number of residents. Conversely, it is wrong for governments, through action or neglect, to exacerbate the decline of rural communities. Governments should do all they reasonably can — in terms of their own operations, allocations and influence on the private sector — to assist rural Australia, as a whole, to increase its population base in both absolute and relative terms.

Goal 2. An equitable share of the rewards derived from rural resources should be reaped by rural people and communities.

At present, rural Australia and rural Australians produce a disproportionately high share of the nation's wealth and assets — and yet, they receive a disproportionately low share of the ensuing benefits. There is nothing wrong with others sharing in the rural harvest. There is plenty wrong when it happens at the expense of rural people and rural communities.

Rural Australians, as citizens, are entitled to a fair go. They also deserve a fair share of the goodies directly attributable to rural places and people. A wide range of individuals and organizations (foreign and domestic, public and private) are thriving from their relationship with rural Australia. However, most rural people and places across Australia are not thriving. Rural Australians can ill-afford to underwrite the well-being of others when their own well-being is anything but certain.

There is something fundamentally wrong when rural people and communities benefit last and least from "rural development". It is inexcusable when governments themselves are party to such exploitation. Rural development policy worthy of the name advances the interests of all rural people and communities. It treats them as ends worthy of respect, not as the means to other people's ends.

Goal 3. A growing and diversifying rural economic base.

It is useless to encourage more people to reside in rural Australia if the rural economy cannot productively absorb them. Similarly, it is far easier to divide the rural economic pie fairly when the pie is getting bigger and there is plenty to go around. Accordingly, a key objective of rural development policies should be to foster a rural economy that is growing in terms of both its size and its diversity.

Agriculture, mining, forestry, and fishing all will continue to be cornerstones of Australia's rural economy. Desirable or not, stratification among producers of the major export commodities into three groups — large Australian corporations, transnational corporations with a network of mid-size Australian producers under contract, plus a relatively small number of entrepreneurial producers who carve out a special niche for themselves — seems very likely to intensify.

Small to mid-size primary producers are going to have to exploit new options (in terms of both what they produce and how/where it is marketed) in order to stay in business. And, Minister Crean and the Department of Primary Industries and Energy are on target when they emphasize the need and opportunities for adding value to primary goods. (Crean, 1992a, 1992b) The economic challenge is for rural Australians to position themselves to capture a much larger share of this lucrative side of the primary industries.

The economic diversity that already can be found across rural Australia must be nurtured and expanded. Tourism, as well as services for retired people, second home owners and long-range commuters are obvious areas in which rural economic growth could occur. There also are promising possibilities for both recruiting and creating businesses (e.g., those in information processing) that have no particular need to have most of their employees physically located in metropolitan areas (Dillman,1991; Horner & Reeve,1991). Rural development policy must actively encourage and assist rural people to become involved and proficient in all these economic arenas, as well as a hundred other, smaller, more localized (but viable) enterprise opportunities (Bryden,1992).

Goal 4. A growing rural employment base.

One fundamental flaw with Australia's primary industries policy is that it is entirely possible (indeed, likely) that net earnings in this sector will increase dramatically without net rural employment increasing by a single job. That may be okay from a balance of trade perspective, but it would be a dead loss from a rural development perspective.

Except for the minority of people who have income sources that are mobile, most migration into Australia's rural and remote centres has been in search of jobs. For all too many, it has proved futile. There are a number of growing non-metropolitan places (in terms of population) that have unemployment rates way above the national average. This is not the hallmark of successful rural development.

Rural development policy must focus on the task of turning economic growth into employment growth. In the rural context, this also requires a lot of attention to the realms of self-employment and pluriactivity (the currently fashionable term for stringing together multiple income-producing activities and part-time work to make ends meet) (Fuller,1990; Gray et al,1993). In other words, being fully employed in rural Australia will not always mean working a regular, year-round job in someone else's enterprise or organization.

More employment in rural Australia and better employment for rural Australians are not just worthwhile objectives. They also are a crucial indicator of the extent to which rural development policies, programs and activities actually are on the right track.

Goal 5. An improved quality of rural life.

Rural Australians want to have a good life, not merely make a good living. They value the traditional rural amenities, such as fresh air, clean water, a nice environment, and a measure of peace and quiet. They also value the amenities more often available to their metropolitan cousins — from effective access to good quality, affordable child care to the ability to take advantage of varied educational, cultural and recreational opportunities. Within the context of resource and circumstantial constraints, Australia already has reduced many key urban/rural disparities.

More could, and should, be done. Rural development policies now need to focus at least as much on building upon rural strengths as on compensating for the "tyranny of distance". Rural policy (and policymakers) must put aside the old "deficit model" that views rural communities strictly in terms of what they lack (compared to the capital cities), rather than all they have (that can contribute to a good quality of life). Most of all, rural development policies in this area must flow from the perceived needs and interests of rural people themselves rather than from the paternalistic presumptions of capital city-based policymakers far removed from the rural scene.

Goal 6. Stronger, more cohesive rural communities.

Existing social policies, programs and payments tend either to be very individualistic, or to stratify rural people along demographic and occupational lines. Such policies foster dependency on governments, and exacerbate social tensions within rural Australia.

Rural development policy needs to place much greater emphasis on the oft-neglected task of helping rural people work together creatively, effectively, and cooperatively *as communities*. Developing local leadership, encouraging self-reliance, and strengthening community institutions — in essence, local capacity building — is a necessary priority for rural development policy evenat the national level. Community development, unlike infrastructure development, simply cannot be imposed from the outside.

If taken seriously, and acted upon sensibly, a rural development policy emphasizing these six goals could profoundly improve the future prospects of rural Australia and rural Australians. We recognize that these six goals all seem fairly innocuous and self-evident. They give this impression, in part, because the inverse of each goal is so obviously undesirable. After all, who would advocate a policy intended to result in "weaker, less cohesive rural communities", let alone in "a collapsing rural economy"?

But, make no mistake about it, these six goals represent a radically different policy agenda than the one currently in place across Australia. No one advocates the "other side" of these goals for the same reason that no one creates a policy encouraging water to flow downhill — namely, that it will happen on its own anyway. The negative inertia in rural Australia today is sufficient to all but guarantee that the inverse of each of these six goals will occur in a significant number of rural places.

In this sense, the lack of an explicit, powerful and comprehensive policy in favor of these six rural development goals is the moral equivalent of a policy against them. No elite group secretly meets late at night in the state capitals, in Canberra, or overseas to plot the decline of Australia's rural people and places. The tragedy is that such a conspiracy need not exist at all in order for rural Australians to continue to be harmed. Just doing nothing is all that is required to make sure that many of Australia's rural communities, like water in a mountain creek, will continue in a downward direction. Thus, we believe Australia's failure to create and implement a rural development policy worthy of the name constitutes a pernicious sin of omission.

Fortunately, it is not an irreversible failure. It is not too late for Australia to turn these six goals into realities. The first step is to understand that rural decline is neither inevitable, nor so difficult (and expensive) to reverse that it would be foolish to bother making the effort.

While there is not a utopian bone in our bodies, we do believe that Australian policymakers — and perhaps rural Australians themselves — have underestimated both the assets Australia has going for it in a rural development effort and the relatively small distance that must be traversed in order for Australia's rural economy and communities to be back on track. Compared to the rural development challenges facing most of the world's countries, including quite a few OECD nations, Australia continues to live up to its reputation as "the lucky country".

To cite one example, Australia does not have to contend with the problems of scale that accompany the presence of huge rural populations. Even if one applies the same principles, policies and practices, trying to create a better future for tens of millions of rural people spread across thousands of rural communities is a far different, and more difficult, task than the one facing Australia. Thus, small rural population is a big advantage.

Australia's other rural development advantages include

a the amount of usable space and the great, diverse, natural resource base;
b the existing physical infrastructure (i.e., transport, communications, etc.);
c the absence of abject poverty, widespread illiteracy, and poor health;
d the presence of social, educational, commercial and financial institutions;
e the reality of widespread, untapped rural economic opportunities;
f the relatively well-educated, skilled, diverse, clever rural population; and
g the level of public resources already flowing into rural communities.

This foundation for optimism emphatically does *not* mean that rural development in Australia will be either quick or easy. It will not. We see no magic bullet, grand scheme, or emerging economic miracle that will save the day in one fell swoop. We do not offer one best system for achieving rural development because we are convinced that no such system exists. Our experience tells us that the rural development process (to be implemented with integrity) must be as localized, idiosyncratic and multi-faceted as rural Australia itself.

MOVING BEYOND CONSPIRACY THEORIES

There is no conspiracy against rural Australia. Ironically, however, what is needed most at the moment is a conspiracy in *favour* of rural Australia. People ought to be staying up late at night — not only across the countryside, but also in the state capitals and Canberra — scheming together to advance the interests of Australia's rural people and places. Although usually thought of in negative terms, "to conspire" merely means to plot together toward a common goal literally, to "breathe together as one".

Such unity of purpose and cooperative action have been conspicuous by their absence. Instead, rural Australians have organized themselves into a variety of splinter groups (usually along occupational lines) — in the relatively rare instances when they have come together at all. This fragmentation is anathema to the creation and implementation of effective rural development policy. Worse, in political terms, rural disunity allows policymakers to act with impunity as they relegate rural development to the "too hard" basket.

The kind of explicit, powerful and comprehensive rural development policy outlined here cannot occur without a broad-based "conspiracy" in its favor. The six goals put forward *are* acheiveable. But, they will not happen by accident, nor will they be accomplished as the result of all the relevant parties behaving as if they are independent agents having no particular stake in the well-being of any of the others.

The difficult truth is that rural Australians — indeed, virtually *all* Australians — are in the same boat together. Since it not possible to sink only part of a boat, Australians' fates are linked more intimately, and more powerfully, than they might prefer. If rural people sink, everyone sinks.

Accordingly, the first step on the road to meaningful and lasting rural development is to begin the process of organizing alliances and finding mutually-beneficial ways of interacting. We see five major alliances that must exist for rural development to end up being more than a short-lived, ineffectual, flash in the pan.

First, alliances should be organized and activated within rural communities. First, and foremost, rural people sharing the same locales need to find ways to move beyond the old divisions among them in order to recognize, and build upon, the common ground that can unite them. Even if their external "partners" in the rural development process fail them, there is much that united communities can accomplish strictly on their own, but very little that divided ones will be able to achieve (Australian Local Government Association,1992).

Across rural communities. Australia has some examples of, and some success in, using rurality to assist people in crossing the boundaries separating them. For instance, the Country Women's Association of Australia, the Isolated Children's Parents' Association, and the Society for the Provision of Education in Rural Areas have become significant national organizations. In addition, a few excellent, interdisciplinary rural centres operate at the tertiary level — most notably, those at the University of New England, James Cook University and Charles Sturt University. However, there continues to be a gap in terms of an all-inclusive rural organization with a remit broad enough to serve as an advocate for the six rural development goals presented here (or, for whatever other formulation of the "the rural agenda" evolves in this process).

Between rural communities and governments. There is a tension inherent to the idea of having a *national* policy that should manifest itself differently, not only from state to state, but also from community to community. Governments at the national and state levels are more experienced in pushing uniformity and enforcing compliance than in fostering diversity and encouraging local innovation.

Similarly, local communities are more accustomed to acting in accordance with government directives (or reacting against them) than they are in designing and taking responsibility for anything as complex as rural development. Nevertheless, governments and communities must find new ways of genuinely acting as partners, instead of remaining stuck in their familiar, counter-productive roles of provider/client, regulator/regulated (Kretzmann & McKnight,1993; Organisation for Economic Cooperation and Development,1990).

Fourth, alliances should be organised and activated between the public and private sectors. The public sector will have a heavy hand in the rural development process. And yet, omnipresent as it is, the public sector cannot do rural development on its own (Davenport,Lynch & Douglas,1991). Ultimately, the success of rural development will hinge equally on the cumulative effect of thousands of private decisions and actions — from the individual to the community level, and from the small business to the transnational corporation level.

For the simple reason that neither side can succeed in fulfilling its goals without the cooperation of the other, effective public-private partnerships will be both a cause, and a consequence, of genuine rural development (Organisation for Economic Cooperation and Development,1991b &1986).

Fifth, alliances should be organized and activated across the urban-rural divide. While there is much common ground and many mutually-beneficial actions that could be taken, there is an unfortunate tradition of pretending that rural and urban Australians are somehow not deeply interdependent. Few things could be farther from the truth. For instance, official trade policies aside, it is crystal clear that both urban and rural Australians would benefit greatly by people throughout the nation really making an effort to "buy Australian". And yet, rural Australians happily go on buying imported manufactured goods when there are comparable equivalents made in urban Australia. At the same time, in order to save a few cents, Australian city-dwellers (and food companies) think nothing of buying Brazilian oranges, for example, while perfectly good Australian oranges remain unsold.

Through jobs lost (or never created in the first place) in both urban manufacturing and rural production, through higher taxes (to alleviate the hardships caused when jobs, business, and profits are siphoned off from the Australian economy), and through unmet social needs (as the demands on the public sector exceed available revenues), Australians pay dearly to maintain the illusion that urban and rural people can afford to treat each other with such cavalier disregard. It is time to stop pretending and to get on with doing whatever each side can do to support and advance the other. Therefore, one task of a national rural development effort should be to conduct a campaign to help all Australians understand, and act positively in relation to, the fact of urban-rural interdependence.

It should be understood that building these alliances is not just a precondition for the *real* rural development that follows. Nor is it just a necessary act of political constituency-building *en route* to the rural development agenda itself. Rather, it is more accurate to view this organizing effort as a fundamental stage of rural development.

During the first century of European settlement in Australia, rural people and places were fundamentally self-sufficient and isolated. They quite literally lived or died on the wisdom of their own decisions and the strength of their own actions. Agencies, events and forces emanating from the "big smoke" (and beyond) could have an impact, but only rarely did they touch the lives of rural Australians immediately or profoundly.

During the second century, that deep isolation increasingly was diminished. Modern transportation systems, the growth and reach of government, the tight linkages with international commerce, and, most recently, the presence of advanced communication/information technologies all contributed to the bush becoming both less isolated and less independent. One consequence of decreased isolation is that rural people and places have become integrated into the larger fabric of Australian society. For better *and* worse, they are no longer on their own.

Many people and communities have not fully adjusted to the changing realities of Australian rural life. And yet, whether or not they choose to recognize, acknowledge, or make the best possible use of, the ties that bind them to the rest of the nation, the fact of interdependence remains. Turning this fact to the *advantage* of rural people and places is as significant a rural development challenge for this generation as overcoming geographic isolation was for previous generations.

The crucial work lies in helping rural people put aside the illusion of rugged independence in order to fully reap the benefits of a variety of mutually-beneficial partnerships. No one can say, in advance, exactly what will come of the partnerships and alliances mentioned earlier. They inevitably will develop a life of their own. There may be disappointments and betrayals along the way. However, it also is highly probable that progress will be made — of a kind, and to a degree, wholly unimagined when these partnerships and alliances first were formed.

THE FOUR "E"S

The six rural development goals noted earlier answer the question of what is to be accomplished. The new rural alliances just described — if brought to fruition — answer the question about who will design, plan, fund, implement, and evaluate Australia's rural development policy. No single party to these alliances — neither local communities, nor the Commonwealth Government — unilaterally can make rural development succeed. It will take a conspiracy among them all to create a better future for rural Australia and rural Australians.

But, the question about "*how*" rural development best can be accomplished remains to be answered. In large measure, this final question must be answered by all the people, organizations and agencies entrusted with the nation's rural development mission. Nevertheless, there are four arenas of action we would recommend in order to breathe life into the rural development goals. We refer to these as the four "E"s: empowerment, environment, entrepreneurship, and education. What follows is a brief overview of each of the four "E"s.

Empowerment

The OECD nations, at least as much as Third World ones, have an unfortunate habit of treating rural development as something to be done to rural areas, or *for* rural communities. What often is missing is any ethos that envisions rural development as something that only can be done properly *by* and *with* rural people themselves.

Governmental paternalism, no matter how well-intentioned, is a very poor substitute for rural communities acting on their own behalf. Rural development validates the maxim that "self-government is always better than good government".[26]

Until recently, arguments in favor of rural self-reliance were considered controversial, and regarded with considerable disdain, by government officials. Now, self-reliance and empowerment have become trendy concepts in the same government circles. We would like to believe that this sea-change in attitudes is the result of an objective analysis of actual experience with rural development initiatives around the world.[27]

However, we suspect other factors have swayed the opinions of some officials. For them, the appeal lies in the fact that this philosophy can be twisted to rationalize slashing public sector funding. In other words, rural people will be "empowered" to have too little access to too few resources to have any realistic hope of sparking rural development.

For other less-than-noble officials, the appeal of rural self-reliance can be found in the ability to pass the buck back to rural communities. In this case, rural people will be "empowered" to shoulder all the responsibility for problems not entirely of their own making, and then to accept all the blame when they cannot solve these problems entirely on their own.

To harried bureaucrats who perceive themselves as being burdened with too few resources and too many responsibilities as it is, the temptation to kill both the budgetary and the accountability birds with one stone — "rural self-reliance" — is perfectly understandable. Nevertheless, it still is wrong. The need for rural empowerment does not create a legitimate excuse for governmental abdication. Empowerment-promoting public policies and public officials continue to be necessary.

Properly understood, empowerment is the process by which all parties having a stake in rural development (i.e., all those in the aforementioned alliances) come to agreement around two essential items. First, they must find common ground at the conceptual level, what will be done and who will play which roles. Second, they must agree on an operational strategy for marshaling and applying the resources (human, financial, physical, institutional, legal, educational, technical, etc.) necessary for all stake-holders to have every reasonable chance of playing their role successfully.

In essence, all stake-holders in the rural development process must be empowered to contribute, as partners, to the creation of the overall policy and implementation plan. Subsequently, *each* stake-holder is empowered to take responsibility for undertaking those specific aspects of the overall initiative each is best-suited and adequately resourced to accomplish. Thus, empowerment is not merely about consultation. Nor is it about superficial participation in the schemes that other parties create, impose and control as a *fait accompli*. Rather, empowerment is about all stake-holders accepting and acting honorably in relation to their independent and collective responsibilities.

We must note that not all rural people are enamoured with the prospect of being "empowered", even in an authentic sense. Some have become content with the dual role of passive client and active critic in relation to other people's actions. However, rural development is not a spectator sport. It is no more legitimate for rural people to abdicate responsibility for rural development than it is for government officials to do so.

When any single stake-holder is faced with a seemingly overwhelming rural development goal (such as, "a growing rural employment base"), the common impulse is to run for cover, pass the buck, or toss the whole thing into the "too hard" basket. Yet, the power in empowerment comes from all stake-holders working together as a mutually-supportive team.

The empowerment process allows stake-holders to come together to figure which pieces of the action each can best accomplish on their own, which ones require support from other stake-holders, and which require joint action. In other words, it is the process by which rural development goals can be reduced to manageable size and through which all stake-holders are helped to play to their individual and collective strengths, rather than to their respective weaknesses.

One concrete priority within this empowerment strategy is to re-examine — and, if necessary, re-create — an institutional structure that will enhance (rather than impede) rural development. Even brilliantly conceived rural policies and programs engendering widespread support have been fatally undermined during the implementation process. Across the OECD nations, there have been so many such "slips 'twixt cup and lip" that intensive attention is now focused on how best to reform, or create, institutions that will do justice to everyone's good intentions and that truly will "deliver the goods" (Stern,1992).

Environment

Environmental considerations are an important part of each of the six rural development goals advocated here. They are a vital, tempering influence, making people cognizant of both the unintended, negative consequences of development initiatives, and the availability of better alternatives.

For example, while the steady in-migration of people to non-metropolitan, coastal areas over the past decade meets the goal of "a growing rural population base", there are legitimate concerns about the environmental damage now resulting from such unplanned and uncontrolled growth. Ironically, the accomplishment of this one goal in these places is now ruining the chances of accomplishing another, equally important, goal: an improved quality of rural life. This conflict need not occur. Properly understood, rural development is a long-term phenomenon that must be economically, socially and environmentally sustainable. To cause a net degradation of the rural environment in the name of rural development is to be as foolish as the proverbial farmer who eats his own seed corn.

Fortunately, Australia already has recognized this contradiction and is well on the way to creating a societal ethos of environmental protection and improvement. This can be seen in the far more than token attention given in recent years to "ecologically sustainable development" (ESD) (Commonwealth of Australia,1992, Ecologically Sustainable Development Working Groups,1992a, 1992b; Holmberg,1992). Even the Department of Primary Industries and Energy (which, in most other countries, would be a bastion of anti-environmentalism) has been working to integrate an ESD philosophy into its mainstream policies and programs.[illegible]

Governments also deserve considerable credit (as do rural people themselves) for the energy, enthusiasm and skill with which they are beginning to implement the National Landcare Program. The combination of strategically-placed public funding and extensive voluntary participation on the part of primary producers, rural citizens and private organizations is a healthy one. Important substantive work is being done and an interesting new rural development alliance is starting to emerge.

Beyond the role that environmentalism plays as a brake on unwise and unsustainable activities, environmental considerations also open up a wide range of new possibilities for rural development. These include a host of excellent new economic and employment opportunities in such areas as ecotourism, environmental audits and analyses, waste management and recycling, solar energy products and services, environmental and outdoor education, mine-site rehabilitation, and water conservation (Griffiths,1993a).

There are two related challenges in transforming these enticing possibilities into pragmatic opportunities. The first is to figure out the nature and needs of the market for each of these areas. The second is to engage in those activities that will result in *rural* people and communities being at the cutting edge of these developments.

There is one other environment-oriented, rural development strategy worth special mention. This is the burgeoning area of what might be called "earth-friendly, health-enhancing" agricultural production. Farming of this kind is predicated upon the significant shift in consumer ideologies and preferences in relation to food. In turn, these attitudinal shifts are causing an important realignment of the market for many agricultural products, particularly in the OECD countries.

Throughout the modern era, there have been two fundamental demands placed on farmers. One was *quantitative*: to produce as much food as possible — both to avoid politically destabilizing, domestic shortages and to generate export earnings. The other was economic: to produce food as cheaply as possible — to allow nearly everyone to purchase the "basics" while allowing the average OECD citizen to have an abundant and varied diet without spending too large a percentage of income on food).

The fact that farmers, for the first time in history were able to routinely achieve these two goals was miracle enough to satisfy previous generations. *How* farmers accomplished this miracle was *their* business.

Current consumers still want farmers to satisfy these two traditional demands. But, in the OECD nations, a relatively wealthy, relatively powerful sub-group of consumers are raising the ante. They nowalso want agricultural products (fresh and processed) that meet two higher criteria.

The first of these is *qualitative*, that foods have the greatest possible nutritional value and the lowest possible level of health-risking adulteration (at any stage, from seed to supermarket). The second new criterion is *environmental*, that producing food has the minimal possible adverse impact on the environment.

In practical terms, this means consumers want food that is produced without harmful chemicals that either destroy the quality of agricultural land, or pollute above-ground/below-ground water supplies. This demand can be difficult to satisfy either for technical agricultural reasons, or because of differing definitions and standards among consumers (Reeve,1990). There also are contradictions within these preferences.[illegible] However, the general direction of these demands, and the fact that the ranks of those making them are growing, remain clear.

It also has become increasingly apparent that these consumers are willing to be flexible on the second of the traditional standards. In other words, they have shown a willingness to put their money where their mouths are by paying higher prices for agricultural goods meeting the new criteria.

All this has potentially huge rural development implications for Australia. While there are real obstacles to overcome, it also is true that Australia may be well-placed to embrace these new criteria. For example, the fact that much of the consumer demand for this type of food comes from the northern hemisphere means that the opposite growing seasons here give Australia a competitive advantage (for six months a year, anyway) over local farmers there. There also is a parallel domestic demand in Australia.

This emerging market has not gone unrecognized. The Minister for Primary Industries and Energy (and top DPIE officials) routinely include glowing references to Australia's "clean, green image and its capacity to produce a range of pure, healthy foods" (Crean,1992; Newton,1993). However, they are talking more about what could be than about what is true of Australian farming. Australia may have a clean, green *image*, but the underlying reality is that Australian farmers routinely use their fair share of artificial agricultural inputs from fertilizers to herbicides and pesticides.

The image alone will not suffice in gaining Australian producers a stable foothold in the emerging market for genuinely clean, green agricultural products especially as consumer demands are codified into testing standards, and as definitional disputes about such terms as "organic" finally are resolved. Similarly, while it is true that Australia has the capacity to produce a range of pure and healthy foods, it is not true that this capacity has been developed very widely, or very deeply, within Australian agriculture (Lawrence,1987).

A dichotomy may emerge soon within the structure of Australian agriculture. The "big ticket", traditional areas of agricultural production are likely to become even more large-scale and corporate-dominated. In other nations, this has meant production systems that are *not* particularly clean, green or pure. For reasons noted previously, the rural development implications of big, corporate farming are not very positive.

By contrast, there are very exciting rural development prospects in the area of earth-friendly, health-enhancing food production, processing, marketing and distribution. This type of agriculture is labor-intensive. Consequently, it has a job-creation potential that mainstream farming cannot match. It also has the advantage of freeing producers from the death-grip inherent to a system that demands more and more expensive technological, land, and chemical inputs (usually resulting in enormous levels of debt) and, yet, results in lower and lower unit prices (and, thus, an inability to repay the debt).

It will not be easy to make the necessary changes, but it may be the last, best hope for current farmers to remain in — and for new ones to enter — the field of agriculture. Chief among the changes will be the need for such clean, green farmers to organize themselves effectively *as a group* for education and training, advocacy, quality control, purchasing, marketing and distribution purposes. The merits of rugged individualism are likely to be seriously limted here.

Entrepreneurship

This "E" lies at the heart of our recommended strategy for Australian rural development. It is an integral part of each of the six goals outlined. In fact, it is not overstating the case to argue that without a significant new burst of entrepreneurial activity across rural Australia, the prospects for deep and lasting rural development are practically nil.

As a nation still experiencing the ravages of prolonged, high unemployment, Australia is understandably preoccupied with the idea of job creation. However, governments cannot afford (even by running budget deficits) to create enough publicly-financed jobs to meet the need. Moreover, to view job creation as "the answer" is to look through the wrong end of the telescope. Job creation is an outcome, not a development strategy.

The simple truth is that the best way to end up with more jobs, especially good, sustainable jobs, is to do three things: prevent unnecessary business closures; expand the productive operations of existing companies; and, create successful new enterprises.

Rural development policy and practice must be single-minded in their devotion to accomplishing these three tasks across non-metropolitan Australia. So much hinges on the realization of these three tasks because they are the only routes to genuine job creation, not only in the private sector, but also in the public sector, as well (because of increased revenues to governments).

The other simple truth is that rural Australia has lots of viable new economic opportunities, even in those places lacking any new job opportunities. In every primary industry, all aspects of "value-adding", tourism, services, manufacturing, and other segments of the economy, there are rural economic opportunities being overlooked and left untapped (Griffiths,1993b).

Everyone does not have to wait around for someone else to create jobs for which they can apply. Some rural people can create their own jobs by creating their own businesses.

The implication of this fact is that self-employment and entrepreneurship deserve to be accorded a far higher priority than has been the case in the past. Rural development, properly understood, is the process through which rural people and communities come to discover and exploit the range of economic opportunities to be found in their own backyards.

In Australia, as in other OECD nations, small businesses have been the leading job creators. Self-employed people and small businesses also have been the cutting edge in product and service innovations, the leaders in finding and exploiting valuable "niches" within domestic and international markets, and the segment of the business world that most frequently buys Australian, reinvests profits domestically, and produces a multiplier effect within Australia (Commonwealth Department of Industry, Technology and Commerce,1992).

Of course, many rural Australians already are self-employed, or own and operate their own enterprises. Quite a few have done, and are doing, very well indeed. They have a valuable role to play as mentors to those people in their own communities who are preparing to take the entrepreneurial leap (Commission for the Future,1990).

Other rural Australians long have engaged in what can be called survival entrepreneurship in which several seasonal jobs and income-generating activities have been strung together to make (often meagre) ends meet. In relation to these more marginal "entrepreneurs", the rural development challenge is to help them figure out how to improve their work, their markets, their ways of doing business, and their results. This is a do-able task, but one undertaken too rarely, and too feebly, in Australia's past.

The Organization for Economic Cooperation and Development has given heightened attention to rural development over the past few years. It, too, now champions local entrepreneurship as one of the cornerstones of any sensible national rural development policy. As OECD's Council notes:

> The priority policy objective for most rural areas is to facilitate their competitiveness in the market economy by building on their natural advantages and encouraging economic diversification... The process of diversification and building local economic bases is so important that... local development efforts now often stress measures to encourage local entrepreneurship and the expansion of existing, community-based enterprises as a more stable and inherently more beneficial form of development [than either relying solely on the primary sector or recruiting outside industry]... The fact that so many communities have found the means to foster development and adjust successfully to economic changes is reason to believe that, with modest help from central governments, many others can as well. (Organisation for Economic Cooperation and Development,1992a)

OECD followed up this rural development policy statement with an excellent book entitled, *Businesses and Jobs in the Rural World* (Organisation for Economic Cooperation and Development,1992b). Among the many valuable insights and recommendations offered are the following:

1. Above all, it is imperative that public policy move away from the practice of trying to shield rural communities from change; unless exposed to change and given the resources and assistance to cope with it, they will continue to be trapped in dependency on external support.
2. A local economic development approach, on the contrary, has the goal of assisting communities and their entrepreneurs to manage change and exploit opportunities for development. It builds on the considerable capacity often present in rural communities for innovation and entrepreneurship. Farmers, for instance, have a long tradition of self-reliance and entrepreneurship. Agricultural policies have inadvertently transformed them into dependent producers, and locked them into a situation where the crucial factor for success is not business acumen so much as effectiveness as a political lobby. The signals that these policies give are in the long term inimical to the development of rural areas.
3. Policymakers will therefore have to respond to these challenges in new ways. Four key areas where reform can occur are:
   - The removal of disincentives to entrepreneurship by outmoded regulations, controls, practices and institutions;
   - The provision of the necessary physical infrastructure and intermediary agencies to assist entrepreneurs;
   - Investment in programmes and institutions for education and training, not only for the general workforce but also specifically for entrepreneurs, and for people wanting to start and expand their own business; and
   - Creation of effective local capital markets and improved access to capital.

One final point. It is both natural and correct for rural development policy to emphasize entrepreneurship for *individuals*. There is no substitute for the combination of an individual with an entrepreneurial spark and an environment in which that spark is fanned through appropriate kinds, and levels, of support from other people and institutions.

At the same time, it also is useful to think of entrepreneurship in broader terms than specific commercial ventures owned and operated by a particular person. The essence of *entrepreneurship* is not business management, but rather the cultivated ability to see and seize opportunities, where others see only problems — or see nothing at all.

The classic traits of successful entrepreneurs — perseverance, creativity, an ability to marshal and use available resources, attention to detail, open-mindedness, and the ability to learn from experience — all would hold communities in good stead.

There is considerable scope for local organizations, institutions and leaders to develop more entrepreneurial ways of thinking about, and acting in relation to, the collective challenges and opportunities before them. This may involve a group of farmers and environmentalists joining together in a Landcare project designed to enhance their area's physical assets. It could include several parents and teachers working collaboratively to establish a school-based tele-cottage in their small town. It might mean the establishment of a small business incubator where local people with a good enterprise idea would be assisted through subsidized space and business support services, (e.g., office equipment and accounting help). Or, it even could involve a core of displaced workers finding a way to acquire and operate an abandoned factory. Whatever the specific local wrinkle on this general idea may be, the point is that a wise rural development policy actively supports community entrepreneurship, as well as individual business creation and rural self-employment.

Education

Last, but certainly not least among the four "E"s, we come to education. From a rural development perspective, education is both the necessary precondition and the primary enabling strategy for the other three "E"s.

As conceived and described here, empowerment cannot be achieved with the stroke of a pen for it goes well beyond any official administrative delegation of authority. It is a profoundly educational endeavour through which all the stake-holders learn what must be done to bring about rural development, as well as how best to do these things. In addition, the institutional dimension of empowerment involves reforming all rural educational institutions — from child care centres, through every level of formal schooling, to the multi-faceted world of adult and community education — by helping them learn how to play their most positive roles in the overall rural development process.

Similarly, the environmental agenda outlined here should be seen as an educational undertaking from beginning to end. Helping government officials, business leaders, and interested citizens understand the rural development implications of Australia's rich diversity of rural ecosystems (and the connections among them all) is the educational task that will make ecologically sustainable development more than a slogan. Figuring out how to bring the wealth of potential employment and economic benefits of ESD to successful fruition is an educational challenge — as is the work of helping rural Australians take full advantage of these potential benefits.

So, too, it will be an educational effort of considerable magnitude to assist farmers employ new clean, green technologies and methods appropriately and efficiently. Even the job of getting everyone to reach agreement about terminology in the complex sphere of earth-friendly, health-enhancing agriculture is, at heart, educational.

The ultimate success of entrepreneurship, as a rural development strategy, also hinges to a surprising degree on educational factors. From learning to correctly identify, research and plan viable enterprises, to learning to master the technical skills and knowledge base a given business demands; and from learning to effectively target, reach and satisfy customers/markets, to learning to properly set up, finance, manage, and sustain a profitable business — successful entrepreneurship is best understood as an intensive and extensive educational process (Daugherty,1992; Landrak,1992; Vickers and Sher,1992.)

The educational dimension of entrepreneurship is poorly understood and badly under-developed. Worse, there is the presumption — reflected in the preponderance of one-off workshops, short courses, and other brief, superficial training activities — that learning how to become a successful entrepreneur is no more difficult than learning how to decorate a cake. This is the kind of trivialization that directly contributes to the high failure rate among new businesses. Access to markets, advice, or money all become meaningless if the budding entrepreneurs accorded such access are ill-prepared to use these resources wisely (Vickers and Sher,1992, Northdurft,1992, Hawken,1987 and Melo,1992).

In short, the prospects for rural development — and, thus, the prospects of a better future for Australia's rural people and places — are remarkably dependent upon a broad range of appropriate educational options and activities. Schools, in fact, can be a powerful starting point for the kind of rural reconstruction needed in so many areas of the country (Cumming,1992; Nachtigal & Haas, 1989; Nachtigal & Hobbs; 1988; Sher, 1978,1986 &1987,).

There is reason for optimism in this situation (McShane & Walton,1990). Australia is significantly ahead of most other OECD countries in terms of two important aspects of education. First, the general quality of both teachers and schools across rural Australia is reasonably high, and compares favourably with rural education provision in other nations (Sher,1982). Second, considerable ingenuity and resources (e.g., through the School of the Air system) have been devoted to the challenge of meeting the basic educational needs of Australian students living in places too remote for there to be a local school.

Australia's success in all these key areas is attributable largely to the combination of effective advocacy by rural parent groups and society's willingness to spend significant resources to give everyone "a fair go" (National Board of Employment, Education and Training,1991, Dawkins & Kerin,1990 and Commonwealth Schools Commission,1988).[10]

However, this is hardly the time for resting on laurels.[11] The long-standing commitment to good quality, local schools throughout rural Australia is crumbling in the face of budget deficits and "squeakier" wheels. Some rural schools are being closed, others are demoralized by constant threats of closure, and most are being forced to cut far more than corners, frills or fat. These steps backward can only harm rural development.

Australia must not squander its current assets and prior investments in rural education. As in all other essential components of rural development, the problems will not disappear by ignoring them. The good news is that, even in these austere times, there are unprecedented opportunities available to Australia's rural schools. The key to realizing these opportunities is to take seriously the centrality of rural education institutions in the overall rural development process.

Technological innovations in the delivery of educational services to isolated children and boarding schools for older students raised on stations and in other remote locations have a proud history. These unusual delivery systems are the ones that garner a large percentage of the (minimal) recognition both the media and politicians accord to rural education. Yet, these systems directly impact only a small number and miniscule percentage even of Australia's *rural* students. Moreover, in rural development terms, these delivery systems divert attention away from education's actual and potential roles in rural community reconstruction.

An overwhelming majority of rural children, adolescents and adult students attend local educational institutions. These rural schools usually are smaller, more basic, and less comprehensive than their metropolitan counterparts, but this does not imply that the quality of teaching and learning are deficient. Good schools — and bad ones — can be found in all different sizes and locations.

However, there often *are* significant differences in the dominant urban and rural attitudes and expectations in relation to their local schools. These differences have important implications for rural development. For example, while most parents and educators —

both urban and rural — care about their children and want them to have the best schools possible, there are divergent views of what "best" means. In an urban context, there is a heavy emphasis on education as preparation for the socio-economic competition students will enter in a metropolitan region. This is basically a competition to get as far "up the ladder" as one can in a variety of large scale institutions (e.g., in universities, government departments, and corporations). In a rural context, this competition seems more less relevant and urgent, perhaps because the rural "ladder" is short, there's an emphasis on self-employment, and local organizations and institutions tend to be *small scale* ones operating on the basis of personal and familial relationships.

One irony here is that rural schools have both fewer resources and a more complex mission than urban ones. Rural educators understand the necessity of preparing their students to succeed in the urban context (given that many students eventually migrate to a city). And yet, their students also must be equipped to be successful in the local rural context. There is an expectation that rural schools prepare their students to function well *"bi-culturally"* as people who may move back and forth between city and country many times. By contrast, there is no expectation placed upon urban schools to prepare their students for anything beyond city life.

In both urban and rural areas, there is a consensus about the need for students to develop strong basic academic skills. Yet, in the countryside there appears to be a broader and deeper faith in the idea that the school should play a vital community role that extends past developing the formal competencies of individual students. In part, this reflects the dearth of other vital community-wide rural institutions. However, it also reflects the rural tendency to see and value the interconnectedness of all the components of their local community.

A rural development policy worthy of the name will include a compelling vision of what an excellent rural education should encompass. It also will address the issue of how best to make education a central part of the overall rural agenda. Our own view is that this must include:

- A concerted effort to make the rural community the foundation and focal point of the curriculum (rather than remaining incidental to it). Routinely using the local area as a hands-on "real world laboratory", and local people as "learning resources", to complement classroom instruction would be an important step in the right direction. While already happening in some places, non-trivial versions of this idea are far from standard practice.
- Educational activities (formal and non-formal) that encourage young people in rural Australia to take pride in their rurality and in their communities. This should not be an attempt to put blinders on them, or to try to keep them "down on the farm" or in their own communities." Outmigration has been, and remains, an option for rural students. However, the option to stay and succeed (especially in rural areas with declining traditional industries) too often has been ignored and left under-developed.

  Rural development is, in part, an act of faith and an attitude. Whether or not they ultimately stay, there is nothing to lose and much to gain by encouraging rural students to see both the general value of rural life and the specific possibilities for making their communities more vibrant.
- Strengthening adult and community education across rural Australia. There currently are many educational activities taking place in rural Australia outside the confines of formal schooling and degree-granting courses of study. If one remembers to include technical and further education institutions, occupational/industry groups, to various social/cultural organizations, one can find myriad adult and community education sponsors, agendas, and outcomes across the countryside (Parliament of Australia,1991).

  Much of this educational work is already or easily could become related to major rural development goals and strategies. However, rural adult and community education programs tend to be under-resourced, under-developed and under-utilized. Strengthening this segment of the rural education scene will help rural development occur more effectively, more widely and more quickly.
- Expanding educational offerings (formal and non-formal) that encourage and foster rural entrepreneurship. Rural Australia needs people who can think and act entrepreneurially. The skills and attitudes characteristic of entrepreneurs are precisely the ones that will enable rural development to become more than just a policy. Accordingly, rural Australia cannot afford to keep having entrepreneurship education either ignored altogether, or, even worse, undermined by the attitudes and actions of many educators.

Rural Australians should not continue to passively accept a situation in which so much of their entrepreneurial potential is squandered, while those who do succeed as entrepreneurs have done so largely despite their education, rather than because of it. There are positive alternatives available— such as the REAL Enterprises program — that, if properly implemented, would be a boon to rural development.[34]

CONCLUDING COMMENTS

Prime Minister Keating has stressed that Australia must go beyond being a *lucky* country and become a *clever* one, as well. The essential message is that Australia has relied too heavily on its bountiful endowment of natural resources, and too little on properly nurturing the creative talents, innovative capacity and entrepreneurial spirit of its citizens.

This message has a special poignancy for rural people. *They* are the ones who have been, and remain, most reliant upon Australia's vast natural endowment. And so, it appears to be *their* proud history and *their* great accomplishments that are being sold short. After all, it wasn't merely luck that enabled rural Australians to transform the often bleak and daunting countryside into a horn of plenty for the whole nation. It also took large amounts of courage, perseverance, faith, hard work — and yes, cleverness.

Still, there is no denying the truth in this message. The future *will* belong to those best able to grasp the new opportunities presented by a world in flux. Rural development can be a powerful tool for this purpose. In fact, by adding value not just to a product but to an entire society and economy, genuine rural development may be the ultimate "value-adding" activity.

Only a clever nation can design and implement rural development properly. Australia can be that clever nation. But, to do so, it must move beyond the conventional wisdom, and embrace a vision of rural development in which the well-being of rural people and communities really *do* matter most.

The views and recommendations found in this article are strictly those of the authors. The Department of Primary Industries and Energy neither wrote nor altered a single word of this text. Thus, it should not be construed as a statement of official DPIE or Government policy, nor should the opinions expressed herein be quoted as if they are those of officials connected with the Department of Primary Industries and Energy. Similarly, any errors of fact and interpretation are ours alone.

This article is dedicated to: Nadine and Jeffery Rowe, at whose small family farm it was written — and without whom it never would have been written at all; Max Jeffery Sher, in the hope that he, along with other members of the next generation, will reap the benefits of the rural development strategy we have proposed here; and Susie and Tevie, who quietly and contentedly have devoted their lives to rural regeneration.

We also would like to acknowledge the trust, collegiality, and valuable assistance accorded us by DPIE's Rural Division staff members, especially Gordon Gregory, Megan Cook, Jayne Garnaut and Onko Kingma. Thanks also are due to Geoff Caldwell and the staff of the Centre for Continuing Education at Australian National University for so kindly making space and support available to us during the period we were in Canberra. Bob Meyenn (Dean of the Faculty of Education at Charles Sturt University) and David McSwan (Director of the Rural Education Research and Development Centre at James Cook University) read an earlier version of this paper and made a variety of very helpful comments and corrections. Jane Harvey deserves credit for doing a sensitive copy-editing job at short notice.

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NOTES

1. This uses the most restrictive definition of rural (i.e., all places with fewer than 1,000 residents) and is the measure traditionally employed by the Australian Bureau of Statistics (ABS). Using the new Commonwealth definition of rural (i.e., all non-metropolitan places with fewer than 100,000 residents), the proportion of the Australian population classified as rural leaps to more than 33%.

2. Using the ABS definition, there are approximately 2.3 million rural Australians (less than 15% of the total population). Using the new Commonwealth definition, there are more than 5.7 million non-metropolitan Australians (around 34% of the total).

3. Of course, there is no need for value-adding industries to use the products of rural *Australia*. There also is the option of importing these industrial inputs. However, that causes problems for the nation's trade balance. It also raises the question of how well urban Australia's manufacturers could compete in world markets, if it had (for example) Japan's problem of having to import most primary goods.

   Since Australian manufacturers are having a hard enough time competing internationally — even with the great advantage of a vast array of rural products in their own backyard — the answer is not likely to be very positive. Accordingly, Australian value-adding activities are likely to remain dependent on rural Australia as the main supplier of essential primary products for the foreseeable future.

4. It is a curious fact that there is no widely agreed upon, and consistently employed, definition of "farmer" in Australia. There are definitions based on ownership status, employment category, residence, average hours worked, goods produced, cash value of agricultural activity, and size of property. However, these distinct data sets have not been integrated — nor can they be sensibly compared and cross-referenced. (For further information see Garnaut,1993.

   To make matters worse, there is broad agreement among government officials and other interested parties that the original data sets are themselves suspect because most of them are gathered through a highly-imperfect system of self-reporting. Thus, for cultural reasons, women farmers are undercounted. Similarly, for tax reasons, farmers have a motivation to underreport their economic activities and earnings. , there are (Useful insights can be gleaned from Williams,1992, although there are problems with these data, too.)

5. Calculated as the number of full-time "farmers and farm managers" (i.e., those self-reporting on the 1986 Australian Census as doing work on their own farm for an average of more than 35 hours per week) as a percentage of the total number of people living in the open countryside and in non-metropolitan places having fewer than 100,000 residents in 1986 (according to the DPI, based on Australian Bureau of Statistics [1992] data). Thus, by this definition, there were 211,108 Australian farmers in 1986, out of a total rural (i.e., non-metropolitan) population of 5,765,000.

6. Calculated as the number of people employed in agriculture and related activities (including full and part time farmers, agricultural workers and contributing family members) as a percentage of the total number of people living in the open countryside and in places having fewer than 1,000 residents (according to the Australian Bureau of Statistics) in 1986. Thus, by this definition, there were 384,000 Australian farmers in 1986 out of a total rural population of 2,251,100.

7. A related stereotype is that rural communities are models of egalitarianism. Unfortunately, however, Australian rural communities have not escaped the burdens of discrimination and stratification based upon all the familiar categories: race, religion, national origin/ethnicity, gender, wealth/income, occupation, sexual orientation, and age. Although interpersonal discrimination and socio-economic tensions may manifest themselves differently in Perth versus Halls Creek, the sad fact remains that rural Australia is not an egalitarian's dream come true.

8. The tendency of such agricultural publications to assume, if not explicitly claim, to speak for the rural population is ubiquitous across Australia. Since most of these periodicals unabashedly support the National Party (or the Liberal/National Coalition), one is supposed to draw the inference that rural people vote as a unified conservative block.

   And yet, voting patterns are another indicator of the growing divergence between self-perceived farm and rural interests. Australia's agricultural sector traditionally has aligned itself with whatever party (or coalition of parties) opposes the Labor Party. However, recent elections have made it apparent that it is no longer an oxymoron to mention "rural electorates" and "Labor Party" in the same breath. Although the Keating Government certainly was not elected because of the rural vote, it is the case that it could not have survived without some key non-metropolitan constituencies.

9. As one might expect, the movement of people in and out of rural Australia fluctuates significantly from time to time and place to place. Some rural areas have experienced important population losses in recent times, especially in the sheep/wheat belt of inland Australia. During the same period, however, rural communites along the New South Wales and Queensland coasts have experienced rapid population growth. As a rule, major rural and remote centres have grown faster than smaller places.

   The basic point being made here is that there has not been a net rural depopulation taking place across the nation. From June, 1976 to June, 1989 — a period encompassing any number of "rural crises", droughts, floods, mouse and locust plagues, distorted international commodity markets working against Australia's farmers, and bad years for specific segments of the farm economy — rural Australia, however defined, experienced a *net in-migration* from other parts of Australia. Depending on the definition of "rural" one employs, there were somewhere between 71,446 and 479,693 more Australians moving into, than out of, rural communities over these years. When one adds to these figures the natural increase in the population (i.e., how many more rural people were born than died) and remembers the relatively small 1976 rural base population, it is clear that rural Australia, despite hard times, is growing rather than declining. (For further information and anaylsis, see Salt,1992)

10. In addition to all the data and analyses produced by university-based agricultural economists and industry-based researchers, there are multiple research units within the DPIE. On farm-related economic matters, the principal DPIE unit is the Australian Bureau of Agricultural and Resource Economics (ABARE). According to DPIE's 1991-92 annual report, ABARE was allocated 303.5 staff years and made outlays in excess of $16 million dollars that year. The annual report also indicates that, in addition to ABARE's 12 regular series of statistical reports and publications, this unit (during that year alone) was directly responsible for more than 100 (mostly farm-related) technical documents, research reports, and conference papers.

11. There are, of course, public servants in other Commonwealth agencies having responsibilities for policies and programs of direct importance to rural Australia and rural Australians. However, no Commonwealth agency divides its turf in such a way as to assess let alone modify the overall, cumulative impact of its activities on rural people and places.

12. At the time this article was written, Simon Crean had been Minister for a few years. In December, 1993, Mr. Crean moved up to become Minister for Employment, Education and Training. He has been replaced as by Sen. Bob Collins. Interestingly, Mr. Crean's immediate predecessor (and fellow member of the Australian Labor Party) John Kerin took this broader rural remit more to heart than any other Minister in recent memory. Former Prime Minister Bob Hawke also devoted an unusual degree of attention to non-farm rural issues Hawke,1989). However, this nascent attempt to deal more comprehensively with rural Australia did not survive the transition from the Hawke Government to the Keating Government.

13. Indeed, there doesn't even appear to be agreement on whether to treat this as a legitimate topic of public attention and policymaking or whether to behave as if rural/urban population distribution (like the weather) is impervious to whatever plausible decisions and actions might be taken. We believe the questions raised here *are* the legitimate concern of the people most directly affected (rural Australians), the public at large, and government at all levels.

    We also believe that it makes more sense to behave as if these relevant parties have considerable influence in shaping the future of rural Australia, than to behave as if they can do no more than ineffectually react to external forces.

14. Such politicians evidently fail to see the irony in their position, given the resentment felt toward them for feeding from the same public trough. The larger point, however, is that it would be hard to find Australians who are not substantially subsidized from the public purse, in both their work and family lives.

15. Our perspective is coloured by comparisons with the extraordinarily difficult and "unfair" situation of rural people in the great majority of the world's nations. Even in the United States, the availability and quality of public services and assistance to rural people varies greatly, but rarely would compare favourably with what routinely is found in Australia.

16. The Australian Bureau of Agricultural and Resource Economics (ABARE; 1992), using Australian Bureau of Statistics (ABS) data classifies farms having an annual estimated value of agricultural operations in excess of $20,000 as "commercial". According to

ABARE/ABS, in 1991, there were approximately 126,000 commercial farms in Australia, of which around 102,000 (81%) were considered to be "family farms" (Australian Bureau of Statistics, 1992) As of 1993, the threshold figure for commercial status has increased to $25,000. (These figures don't match up exactly with those used earlier in this article due to differences among data sets.)

17 What DPIE's Annual Report reveals is that funding for these initiatives is nothing more than the proverbial drop in the bucket. The Primary Industries Marketing Skills Program, for instance, received less than 1 *million* dollars out of DPIE's 1.9 *billion* dollar budget last year. This, in turn, raises questions about the extent to which these programs are public relations efforts, rather than serious attempts to help traditional producers make the necessary adjustments and transitions.

18 "Mabo" refers to a recent, and highly controversial, court decision affirming the land rights of Australia's indigeneous people. Large primary producers, particularly in the mining and livestock industries, have been angered by this decision and their perception of its adverse implications. (For background information (since the story itself still is unfolding), see Commonwealth of Australia,1993.)

19 Some analysts argue that the introduction of the new agricultural biotechnologies into Australia will heighten dependence upon the foreign firms that control these innovations. (See Lawrence,1987)

20 While having a clear administrative rationale, it is perhaps also a telling sign that responsibility for the Farm Household Support Scheme has been vested in the Department of Social Security, rather than the DPIE.

21 Primary producers, like the rest of us, show an amazing ability to avert self-criticism and responsibility-taking. In real life, they played a significant, active part in creating this sad story.

However, primary producers are not merely "whingeing" when they accuse others. The set of assumptions upon which Australia's public and private sector leaders have based their policies are not gospel. An awful lot of faith is being placed in the notion of "free markets" and "level playing fields", when there is precious little hard evidence that the "market distortions" that have bedeviled Australian primary producers *really* will disappear. When push comes to shove (as it so often does in a world of commodity surpluses), it stretches one's credulity to believe that powerful nations will refrain from acting in powerful, albeit hidden, ways to promote *their* own interests over the scrupulous maintenance of a "level playing field".

Furthermore, the rules of the game *do* favor large, transnational corporations. This is not the subject of much debate. The controversial question is whether this is the "natural functioning" of a free market economy, or a major "market distortion" in its own right.

22 There certainly are primary producers involuntarily going out of business and a declining number of owner/operators in farming, fishing, forestry and mining. What there is *not* is a mass exodus of owner/operators across the breadth of the nation's primary industries.

The *national* statistics on farming (the usual focus of media attention) are clear. According to ABARE's *Commodity Statistical Bulletin: 1992*, in 1986-87 there were 128,707 "agricultural establishments": farms with an annual estimated value of agricultural operations in excess of $20,000. And in 1990-91 there still were 124,975 such establishments in business. (Australian Bureau of Agricultural and Rsource Economics, 1992) A drop, yes; an exodus, no.

23 One key reason is that transnational corporations are more interested in having assured markets for their inputs — and a secure source of good quality, raw commodities to which they can add value — than they are in doing the hard (marginally remunerative) work, and assuming all the risks, inherent to operating production units all over the face of Australia.

24 There are some "locational issues" addressed by the government's Social Justice Strategy, but they are very minor in terms of the priorities expressed and the resources allocated. The biggest (more or less) rural thrust is the emerging "North Australia Social Justice Strategy". Even here, the goal is not to develop stronger rural *communities*, but rather "to ensure the better delivery of needed services".

25 Compared to the American situation, there is more dependency here because Australian governments have been much more dependable sources of a wide range of assistance and support. Australians clearly have a complex, "love/hate" relationship with their governments: complaining bitterly about them, and yet, counting on them for all needed assistance.

26 This usually is attributed to the late British political scientist, Harold Laski. In the United States, Professor John McKnight at Northwestern University has done extensive intellectual and community work that gives concrete meaning to this maxim. He also is an eloquent and insightful analyst of the phenomenon of "disabling help".

27 One of the ironies of rural development in the OECD countries is that the conceptual model (i.e., the vision) of how best to actually achieve rural development lags well behind that routinely employed in Third World nations — often under the leadership of experts from OECD countries! It is an enduring mystery why (beyond snobbery) the connection so rarely is made between what already has been learned in the Third World context, and what needs to be learned in the OECD nations.

28 Indeed, the Minister or DPIE officials rarely make a speech, or issue a major report, that does *not* include more than a passing reference to ESD. It has become similar to the automatic inclusion of "social justice" in their statements and publications. Only time will tell, however, the extent to which either of these truly affect what is *done*.

29. Among the contradictions is the fact that consumers want both pure, chemical-free food and perfect-looking (unblemished) food. This is hard to achieve. However, there are some encouraging developments, such as Dr. Wong's research at the Tasmanian Department of Primary Industries on using natural alkaline materials to eliminate fungal damage (blemishing) on apples. Others have repeatedly made the point that such advances could become common if existing agriculture research priorities, and budget, were re-directed toward these areas.

30 Ironically, the political strength of the parents of isolated children (and the romantic image, to urban policymakers anyway, of Schools of the Air) are having some counter-productive effects. It appears that some politicians and officials make the unfortunate mistake of thinking that once they have "taken care of" isolated kids, they have met the needs of Australia's rural students. This is analagous to the mistaken belief that "farmers" and "rural people" are synonymous terms.

31 A new book, *Education and Public Policy in Australia* (Margison, 1993) sounds an important warning about the direction in which Australian education, as a whole, is headed (Marginson,1993). On the rural side, specifically, there also is cause for a bit of alarm. Consider, for example, a recent article in *The Land* (24 June, 1993), in which Hon. Ross Free, the Commonwealth Minister for Schools, Vocational Education and Training, gave a brief overview of the national agenda for rural education.

He begins by noting that the Country Areas Program will cease to have a seperate identity as of 1994. Not a very rural development-oriented move. He then refers to the drive for higher rural retention rates, specifically mentioning the millions of dollars to be spent on building/refurbishing hostels for rural students. This, of course, only has meaning to the tiny, albeit politically influential, fraction of rural students who are too isolated to attend local schools.

To conclude, he devotes the most space to rural vocational education and training. He announces that Rural Traineeships and Apprenticeships will be offered in (only!) the following areas: agriculture, horticulture, timber, horse management, and wool combing! So much for a comprehensive response to either the current realities, or the future prospects, of Australia's rural economy.

32 Clay Cochrane coined a term for this phenomenon — "metropollyanna", this the mistaken belief that, sooner or later, everyone will end up in the city and live happily ever after.

33. In December, 1989, then Prime Minister Hawke issued a major Statement on Rural and Regional Australia. As founders of the U.S.-based program to which Mr. Hawke refers in this Statement, we can only applaud his suggestion and express the hope that Australians will act on it one day.

The process of economic self-help requires a local commitment to change, and this often begins with the development of a local consensus that the "do-nothing" option is not acceptable... The States and local authorities will continue to provide the specific financial assistance to local or regional enterprise developments. In doing so, it is to be hoped that those authorities will benefit from some of the best in innovative ideas from overseas, such as the school-based rural enterprise activities in the United States. (Hawke, 1989)

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ABOUT THE AUTHORS

Jonathan P. Sher has worked in the areas of rural education and rural development for the past two decades as a researcher, advocate and program designer/director. The recipient of a doctorate in education, planning and social policy from Harvard University, Jonathan is the principal author of two books on rural education, as well as dozens of published reports, articles and commissioned papers. Dr. Sher is the Founding Director of REAL Enterprises — a pioneering effort across the United States that prepares and assists rural students (at the secondary and TAFE levels) to create their own real jobs by planning, starting, owning and operating their own real businesses.

Although most of his professional experience has been in the United States, Dr. Sher worked for several years as the head of CERI's rural programs within the Organisation for Economic Cooperation and Development (OECD). For the past nine years, Jonathan also has visited Australia frequently for both personal reasons and professional assignments. Most recently, he has been a consultant to the Rural Education Research and Development Centre at James Cook University, as well as a Visiting Fellow at the Australian National University.

Katrina Rowe Sher has many years of experience as a rural primary teacher and teacher educator. Born and raised in the Adelaide Hills, she has worked in several outback communities of South Australia — including two years spent directing a special project (funded by the Commonwealth Schools Commission) assisting teachers in Hawker, Leigh Creek, Nepabunna, Marree and Parachilna.

Ms. Sher's perspective on rural development also was shaped by her earlier experiences as a farm worker, a packer in an abattoir, and a production line employee in a fruit canning factory.

Katrina earned a bachelor's degree in education from Flinders University of South Australia, as well as a master's degree in education from the University of North Carolina, Chapel Hill (USA). In addition to continuing to teach in the United States (at the Duke School for Children), Katrina has been an active partner with Jonathan in their international consulting firm — Rural Education and Development, Inc.

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CONFERENCE KEYNOTE ADDRESS

CREATING A CONSPIRACY IN FAVOUR OF RURAL COMMUNITIES

Dr Jonathan Sher — USA

I woke up this morning in my lovely hotel room and gazed out my window at the fabulous panorama of this corner of paradise. And, as I basked in the beauty of such an idyllic setting, and as I started looking forward to the fascinating conversations and presentations ahead of us this week, I just shook my head in wonder and said to myself: "My goodness, the rural crisis sure has been good for me"!

Because of rural problems, I've had the opportunity to travel to wonderful countryside communities all around the OECD nations. Because of rural issues, I've had the privilege of earning a good income to support my own family. Because of the rural agenda, I've garnered professional honours, such as the invitation to be your conference keynote speaker. Because of the rural sector, I even had the chance to learn to live with the irony of being a rural expert based in Paris. Moreover, the benefits on being involved with rural development haven't only been professional. In fact, I met my wife when I was sent by the Commonwealth Government to evaluate a rural education program Katrina was running based in Leigh Creek, South Australia. Beyond any shadow of a doubt, my involvement with rural people and places has been a blessing to me, and a well-spring of opportunities for me.

I suspect a fair number of you, too, have benefited profoundly from rural work, from rural life and, in a certain sense, from rural problems. The fact that we, as rural-oriented professionals and academics, have benefited from our involvement with rural communities hardly makes us an aberration. On the contrary, we are merely a tiny sample of the spectacular spectrum of beneficiaries across our societies who are deeply indebted to rural people, rural places and rural resources for their own well-being.

In the report Katrina and I wrote, entitled "Beyond the Conventional Wisdom: Rural Development as if Australia's Rural People and Rural Communities Really Mattered" [which was made available to each of you in your Conference packets], we pointed out that the rural sector of Australia (and of most other OECD nations) has been the goose that lays the golden eggs, the mother lode, the cash cow and the eternal fountain of wealth flowing out across the whole society. The rural sector continues to be, and will remain, absolutely central to the well being of the entire nation. The idea that the rural economy is no longer important to the nation as a whole — like the idea that rural people and communities are marginal to society — is just plain wrong. From being the provider of food self-sufficiency for the nation (a fact long taken for granted by urban dwellers) to being the source of Australia's international identity (and, thereby, the big draw in terms of the nation's 7.5 billion dollar foreign earnings from tourism), to being the place of recreation and renewal for city people, the rural sector is now, and will remain (even in this ostensibly "post-industrial age") the firm foundation undergirding the nation's living standard.

Australia's entire economy is heavily dependent upon foreign earnings. Without the revenues gained from exports, the Australian economy would be "down the gurgler" in short order and Australians (urban and rural) would quickly cease to be able to afford the very nice living standards to which they have become accustomed.

In light of this reality, it is worth reminding people that rural Australia is the primary source from which these economic blessings flow. While only 15% of Australia's people live in rural areas, approximately two-thirds (67%) of Australia's foreign earnings are attributable to rural places, rural people and rural resources. And yet, to the average politician (let alone to the average urbanite) this absolutely crucial, and disproportionately large, rural contribution to the nation's wealth and well-being appears to be largely unnoticed — and certainly, unapplauded. These same facts are true, to a greater or lesser extent, across the OECD countries.

If you were a visitor from another planet, you would think the rural people and the rural communities who generated all this wealth for their nation should, and would, be wealthy themselves. If you were a visitor from another planet, you could be excused for presuming that rural people and communities should, and would, be accorded enormous respect and gratitude from the rest of the society for the vastly disproportionate contributions they unceasingly make to everyone's well-being. And, if you were that visitor from another planet , you doubtless would expect that the rest of society should, and would, cheerfully and fulsomely nurture rural people and rural communities so they would be in a position to keep all those rural blessings flowing.

Unfortunately, as people from this time and place, we know only too keenly that none of these "should and would" statements actually reflect reality. Whether out of societal ignorance, arrogance, or willful amnesia — we know rural people and communities are neither cherished nor accorded the support they so richly deserve. Instead, rural people tend to be simply forgotten, or actively denigrated (indeed there is a whole lexicon of derogatory terms for country folk), or merely dismissed with nostalgic sentimentality as anachronisms in our modern world — irrelevant, albeit warmly remembered. Such disrespect and ingratitude are nothing short of shameful.

Adding injury to insult, we know that "ordinary" rural people and communities are the ones benefiting last and least from most so-called rural development. Rural development may be carried out in their name, but only rarely is it controlled by ordinary rural people — and thus, only rarely do ordinary rural citizens reap the lion's share of the rewards from the "development" taking place around them.

One good example of this phenomenon can be found in the area of employment. Jobs — especially good jobs — are a priority concern almost everywhere. Rural resources get translated into an enormous number of jobs. However, the disheartening reality is that most of these rural-generated jobs do not, in fact, go to rural people. The employment benefits of rural resource development are transported "downstream", outside the community and often even outside the nation. There is a vast army of people outside rural Australia who owe their livelihoods, their jobs and their incomes to Australia's rural sector. This long list includes truckers and dock workers who distribute rural commodities, employees of urban manufacturing and processing industries who add value to rural "inputs", capital city-based public servants and academics who study, regulate and "assist" rural people and industries, and myriad private sector employees in the travel, insurance, finance and other industries reliant upon rural contributions.

There is nothing inherently wrong with lots of people in lots of places sharing in the bountiful rural harvest. You and I are among these beneficiaries. Nevertheless, there is plenty wrong when the beneficiaries refuse to acknowledge, honour, or do their fair share to return the favour to their rural benefactors. Similarly, there is plenty wrong when the very same rural people and communities responsible for the bountiful harvest in which we all share are left without effective access to necessary services, are having already minimal amenities and infrastructure withdrawn, and are denied appropriate investment in their future. And finally, there is plenty wrong when the assistance that is provided to the rural sector is offered grudgingly, paternalistically and with a sense of being charitable to those living "in the bush".

For society, as a whole, and governments, in particular, to do all they can to support rural self-determination and to promote rural well-being does not constitute an act of charity, kindness or magnanimity. Rather, investing in the rural sector is nothing more (or less) than an act of common sense, of well-earned respect, of enlightened self-interest, and of simple justice. Rural people and rural communities — for the disproportionately high contributions they long have made, are still making, and will continue to make to the nation's well-being — deserve nothing less than our very best efforts to help them help themselves create a brilliant future.

This chasm between the high level of beneficial rural contributions to our societies and the low level of appropriate societal contributions to the rural sector — in other words, the great extent to which rural people, communities and resources are shortchanged, misunderstood and maltreated by the larger society — constitutes the context of this conference. The question I want to ask — and the challenge I want to present — is "What are we going to do about it?". What are we going to do through this conference that will help end the marginalization of, and dispel the pernicious stereotypes about, rural people and rural communities? What are we going to do as a result of this conference to help rural people and communities not only survive but thrive in the years ahead? What are we going to do?

I am emphasizing the words we and do because, in the final analysis, our actions are the main (if not the only) outcomes of this entire conference. If we merely use, this gathering to catch up with old friends and to make new ones while basking in an idyllic setting, then the conference will not have been worth convening. If we choose to use our time together merely to garner a few extra bits of technical knowledge, and to learn a few new tricks of our trade, to take home with us, then we will have squandered the marvellous opportunity the conference organisers have offered us.

As your keynote speaker, I want to stress the need to take a good hard look at ourselves and at what we should, and will, do once we leave this lovely venue. Like most of you, I have been to many rural conferences over the years. Perhaps you, like me, have observed the curious phenomenon that most such conferences have relentlessly focussed on what "they" — that is, someone (anyone!) other than us — are doing wrong and what "they" should do differently and better. Who "they" are changes from conference to conference. Sometimes, "they" are the transnational corporations and other powerful economic entities we view as having wreaked havoc (social, environmental and economic) on the rural communities and situations with which we are most familiar. Often, "they" are the politicians and senior policymakers we have identified as the ones responsible for misguided policies, inadequate funding levels and a lack of appropriate regard for the well-being of rural people and places.

Most often, however, "they" are rural people themselves. Our tendency is focus on some sub-group of the rural "they" — whether it's community leaders, indigenous populations, women, youth, farmers, and so on. We talk about their characteristics, survey their attitudes, analyze their behaviour, critique their choices and give advice about what they should do next. "They" may be the people and places about which we care deeply and toward which we have made profound commitments of our time, talent, and energy. But "they" are not "us".

Whether "they" are economic elites, political leaders or ordinary rural folks, my point is that at most conferences we spend far more effort on what "they" should do in light of our deliberations and far less effort honestly confronting what we should do as a result of our time together. "They" remain separate and distinct from "us" — from the kinds of people present at this important gathering. Lest you think I am exaggerating this point unduly, please assist me in conducting a brief exercise I hope will help us better understand just who we are and what we represent.

Please stand up if you consider yourself (or would be considered by others) to be a member of the professional/academic/bureaucratic class. [Note: Virtually everyone in the group stands up]. Now, please remain standing, if you believe (or if others believe) that, in your professional life, you have a discernible impact and a more than trivial influence on rural people and places. [Note: Very few people sit down]. Please remain standing if you were raised in a rural area (or if you have long-term, first-hand knowledge of rural life. [Note: About 25% of the people sit down]. And finally, please remain standing if you now live and work in the very same rural community in which you were raised. [Note: Only a handful of people remain standing].

Thank you for helping me so graphically make the point that this is not a rural conference in the sense that it is a gathering of farmers, fishers, miners and foresters, nor a convention of rural shop keepers, self-employed people related to the tourism industry, the employees of small businesses in small towns, and the rural unemployed. While this is a conference bringing together a fascinating variety of people who work in a variety of fields in a variety of places both across Australia and overseas, there is a common thread and a common bond among us. "We" in this case are a sampling of the myriad professionals/academics/bureaucrats who have an interest in and/or responsibilities for rural issues, people and places.

The fact we are a group of rural-oriented professionals is nothing to be ashamed of nor apologetic about. Too often, the story of rural development — or, conversely, of the rural crisis — is told as if we professionals had no significant role at all. As I will spell out in more detail a bit later, we professionals deserve a substantial amount of both the credit and the blame for what has happened to, and within, rural communities over the past few decades. We rural professionals can be characterized in many ways, but the one role wholly unavailable to us is that of the "innocent by-stander". There are no innocent by-standers in our ranks. For better and worse, rural-oriented professionals have been, and continue to be, an integral part of the overall history of rural development and rural life.

While our impact has been ubiquitous across the rural scene, and while we are integral to the story, our contributions (good and bad) have been distinctive ones that flow from our status and behaviour as professionals. It's worth remembering that, as professionals, we have been socialized in ways and immersed in a professional "culture" that remain separate and distinct from the socialization processes and cultural norms characteristic of "ordinary" rural citizens and communities.

Thus, to be an urban-raised professional doing rural work is to be engaged in cross-cultural activities. And, even rural-raised professionals properly are described as being (at best) bi-cultural. In my view, both the reality of, and the continuing potential for, cultural clashes between rural professionals and "ordinary" rural people have been overlooked and, thus, left largely unreconciled. How best to negotiate these cultural differences strikes me as a topic worth addressing at this meeting.

As a class and as a culture, we professionals accord very high priority to three things: specialized knowledge, portable competence and career advancement through geographic mobility. These are what we value and these are what we reward. By contrast, rural people tend to value generalist knowledge, local-specific competence, and geographic stability. Obviously, these are gross generalizations, but they are a useful beginning for the process of identifying different cultural norms and values.

In essence, professionals are rewarded for "doing the thing right" whatever that thing might be — from teaching the history curriculum, to performing a medical procedure, to attracting an industry to relocate to a given rural area. However, it is my observation that we professionals are so concerned with how to "do the thing right" that we too often, and too easily, skate over the issue of what it really means to "do the right thing". In other words, we tend to pay far too little attention to the ethical dimensions of our own work as professionals. We are only too happy to allow narrow role definitions and hierarchical structures to take the onus off of us to really think through the ethical integrity of the professionals tasks assigned to us. Is the history curriculum we teach really helping rural students understand their past and grasp the right lessons for their future? "That's a question for somebody else", we are likely to say. But, I would argue we have a serious ethical responsibility to ensure we not only do the thing right, but also do the right thing.

What does it mean to do the right thing as rural-oriented professionals? As a first principle, "doing the right thing" must have as its foundation a deep and abiding respect for the integrity of rural people and rural communities. In other words, our starting point should be a commitment — born of this respect — to serve as an effective force promoting the empowerment and well-being of rural people, both as individuals and as communities. Respect for who they are and what they want should be the key characteristic of our own work.

In our efforts to both do the right thing and do the thing right, there are three positive facts that should encourage us, empower us, and energise us. The first fact is that neither rural decline nor rural exploitation are inevitable. I am not a theologian, but I know the Bible well enough to know there is no reason to believe that rural decline and rural exploitation are God's plan or desire for our world. I am not a scientist, but I know enough about science to know there is no immutable law of nature that dictates rural decline or rural exploitation. I am not an economist, but I know enough about economics to know there is no economic force that preordains either rural decline or rural exploitation. Thus, the rural crisis is not a matter of destiny, but rather the consequence of a series of choices that people have made.

The good news and the bad news is that rural decline and rural exploitation are matters resting in our hands and in our collective choices as societies. Because rural problems are the results of choices people have made, people also have the choice of solving these problems.

That is very good news, indeed, because if there weren't meaningful choices people could make about the future of rural communities, rural economies and rural life, then there wouldn't be a heck of a lot worth discussing over the next few days. Where there is choice, there is hope.

The second positive fact of life in our favour is that we have more than hope with which to work — we also have extraordinary power. This might strike many of you as nonsense, or wishful thinking, or a great exaggeration — largely because you (like me, I might add) often are only too aware of your own limitations and sometimes feel a discouraging sense of powerlessness. Normally, we think of power as something residing in economic elites or in a few political leaders.

And yet, a colleague of mine, John McKnight, helped me understand that, collectively, we, as members of the professional/academic/bureaucratic class hold an astonishing amount of power in our hands. The first domain of our collective power is that we are the ones who get to define society's problems. Think about it. In our society, who defines what is wrong, and who decides which competing concerns are given priority? It's certainly not "ordinary" people (rural or urban) who make such determinations for our society. In truth, the answer is that, collectively, we define and we decide such matters. We call this process "needs assessment" and we have assumed the power to be in charge of this process — on society's behalf, of course.

Next comes figuring out what resources must be marshalled to address the opportunities, and to redress the problems, identified through our needs assessment activities — and then, making choices about how best to employ and deploy these resources. We call this crucial process "planning" and, amazingly, we, as a class, get to do this, too. It certainly is not a realm in which "ordinary" people's ideas, actions and desires dominate.

Needless to say, some group has to be in charge of actually carrying out the plans and programs we designed to meet the needs we identified. We call it "*implementation*", and, guess what, we get to do this, too! Finally, just to complete the circle — and to reveal the full extent of our collective power as professionals — it turns out that we get to control the process of deciding whether what we did, based on what we planned in accordance with our assessment of needs and opportunities actually succeeded. We call this process "*evaluation*" and, yes indeed, it is a process that we, as a class, fully control. So, the second positive fact to keep in mind as we engage in the work of this conference is that we have an extraordinary amount and range of power at our disposal — especially if we do choose to work collaboratively and cooperatively.

The inevitable question that arises is: "On whose behalf and to whose ultimate benefit are we exercising our power?" I hope this question is one you ask each other, and ask yourselves, over and over again during this conference. Are we going to allow ourselves to behave as mere tools of the existing political and economic elites — (another group with extraordinary power that is manifest largely through controlling us!) who are the chief beneficiaries of the *status quo*? Are we going to take a narrow, selfish view and use our power primarily to ensure our own well-being? Or, are we going to use our power to advance the best interests of the "ordinary" rural people, places and communities we touch during the course of our professional lives?

While these need not always be mutually exclusive uses of our power — I am, in fact, an advocate of "doing well by doing good" — there are times and circumstances when we do have to choose sides and to take stands that will favour one group over another. At that crucial moment of reckoning, whose side will we be on? With whom will we cast our lot? My hope is that at such times we will have the courage and the respect to first and foremost advance the best interests of the "ordinary" rural people whom we have agreed to serve. Our professional involvement with the rural sector sure has been good for all of us. In return, we need to do all in our considerable power to ensure that rural communities also have every chance to realize their enormous positive potential. They deserve nothing less from us — not as an act of charity on our part, but rather as a matter of our ethical obligation to do justice.

The third, and final, positive fact I want to share with you this morning is that we have a variety of potential allies as we carry out our professional endeavours — allies who can ease our burdens, help us choose more wisely, and enable us to act more effectively than we can do in isolation. In our report "Beyond the Conventional Wisdom", Katrina and I spell out who these allies are and how best to build these essential alliances. Briefly, we advocated the creation and activation of five alliances: within rural communities; across rural communities; between rural communities and governments; between the public and private sectors; and, across the urban-rural divide.

If we were writing this report today, we would add two key alliances to this list. The first is the *interdisciplinary* alliance among rural professionals across the "turf" lines that have kept us divided for far too long (a task this conference could go a long toward accomplishing). The second is the alliance between "ordinary" rural citizens and the rural professionals who are supposed to serve them. There needs to be an alliance through which we begin to see ourselves as being in *partnership* with rural people, instead of merely perpetuating the traditional power relationship with us as the dominant service providers and them as the passive clients. These two additions to the five alliances outlined in our report would equip all of us with seven new paths toward genuine rural renewal and development.

It must be understood, however, that working hard to build these seven alliances is not just a precondition for the *real* rural development that will follow. Nor is taking this step just a necessary act of political constituency-building *en route* to the main rural development agenda. Rather, it is most accurate to view this organising effort — this creation of key alliances — as a fundamental stage of rural development itself.

Allow me to take this point a bit further. The task of building these alliances — a task which could and should begin right here and right now with this conference — is an act of conspiracy. And, I am convinced that rural Australia (like rural communities nearly everywhere) desperately need a conspiracy in their favour. Although usually thought of as something negative, "to conspire" merely means to plot together toward a common goal: literally, according to the dictionary, "to breathe together as one."

Such unity of purpose and cooperative action across traditional boundary lines have been conspicuous by their absence in rural Australia, rural America and throughout the rural sector of the OECD nations. The uncomfortable truth for rural professionals and rural citizens alike is that "going it alone" and rugged independence will no longer succeed as strategies for either individual advancement or collective development.

Virtually all of us are in the same boat together — and it is still not possible to sink only part of any boat! Our fates are more closely and more powerfully linked than we often recognize, acknowledge — or prefer. The truth, however, is that we must actively help each other float, in order to avoid all sinking together.

So, we have a lot going for us as we embark upon the work of this conference. We have choices. We have power. And, we have potential allies. Armed with these sources of reassurance and strength, I hope we will make tremendous progress together — both during and beyond this conference.

What will we do as a result of this conference to help rural communities survive and thrive? That remains my main question for you and my abiding challenge to you. In the end, of course, we will still be imperfect people in an imperfect world. Nevertheless, if we remember that what we can make real choices that do matter, if we remember the extent of our collective power, and if we remember that we have the chance to travel our path with valuable partners and allies alongside us, then there is reason to be optimistic. And, there is good reason to think we can become much less imperfect people who have contributed to making this a notably less imperfect world.

In conclusion I would like to share with you a favourite story. It first was told years ago by a rural civil rights leader in the United States named Fannie Lou Hamer.

> *There was a very wise old man, and he could answer questions that seemed almost impossible to answer. Well, some young people were going to see him one day. On the way there, they said to each other, "We're going to trick this old man today. We're going to catch a bird, and we're going to carry it to this old man. And, we're going to ask him, 'This that we hold in our hands today, is it alive or is it dead?' If he says, 'Dead,' we're going to turn it loose and let it fly away. But if he says, 'Alive,' we're going to crush it." So, they caught a bird, walked up to the old man and said, "This that we hold in our hands today, is it alive or is it dead?" He looked at the young people and he smiled. And then he said, "It's in your hands."*

That is the message I would like to leave with you. Rural development is not somebody else's concern — nor does the answer to the open question about whether rural communities will survive and thrive in the years ahead rest solely with either the elites or the "ordinary" people. What we do — while we're here together and after we go back home — really matters. Indeed, to a very large extent, the future of rural communities, of rural society, and of rural life is in our collective hands.

CONFERENCE DINNER ADDRESS

WOMEN AND RURAL AUSTRALIA

Senator The Hon. Margaret Reynolds — Australia

My theme tonight is to focus on the role of women in rural communities. For many of you this subject is well known and obviously one of direct relevance to any genuine analysis of relationships in rural communities. However, it has not always been so, and, even in 1994, many rural women would agree that their direct contribution to the well-being and economy of their communities is too frequently under-valued. At best rural women's role at home, on the land, in the country towns is taken for granted. Women's triple shift, particularly during recession, drought and downturn in particular commodity markets, is rarely seriously considered by Governments in their calculations of social needs in rural communities, and at worst rural women face particular forms of hardship in a world still stereotyped by assumptions about gender roles. Aboriginal women experience the double disadvantage brought about originally by colonisation and perpetuated by racism.

Colonial Australia — A society dominated numerically and philosophically by men – nevertheless produced significant women pioneers who contributed to the early establishment of our rural sector and major primary industries.

While the recorded history of land settlement of Europeans focuses on male achievements, pioneer women established and maintained the first rural communities in very difficult environments. They also produced large families in quite horrendous conditions which say many women die in labour and children die young because of disease and lack of medical care.

While men cleared the land and ring-barked the trees (often with women's support and assistance), women also coped with the harsh conditions of daily survival in the struggle to provide food, shelter, clothing, health care and education for their families.

Many historians have created a fiction about intrepid explorers and bushmen battling the great Australian outback ignoring the conditions in which women shared equally in these hardships. Yet it was the women who managed to keep up appearances and maintain the standards of dress in a climate totally unsuited to the fashions of the northern hemisphere. Home crafts, writing, literature, painting and music brought by pioneer women helped create the beginnings of a rural life which was broader than the shoulders of those rugged bushmen.

Two pioneering women who overcame the prevailing male culture of colonial Australia where Elizabeth Macarthur and Mary Penfold, whose work contributed to the establishment of the wool and wine industries.

Elizabeth Macarthur took over the management of merino flocks established by Colonial Secretary John Macarthur when her husband returned in disgrace to England after the rum rebellion.

For eight years Elizabeth Macarthur ran the Campden Park estates, Elizabeth Farm and the Seven Hills Farm and its staff of 90 convicts and emancipists by herself with conspicuous success. She visited Camden Park regularly on horseback, sometimes completely alone. Elizabeth became deeply involved with the cross breed of merinos for their wool. This was a new departure, since up to the time of John's leaving, New South Wales farmers had only thought about sheep in terms of mutton. Five years after he left, his wife was growing wheat, barley and oats as well as overseeing the difficult and novel business of shearing and wool washing, and having the clip dressed, baled and shipped. In spite of her family duties, she was an excellent manager, exporting high quality wool to England, where her husband sold it. Her improvements of the breed and the wool yield of the Macarthur flocks so impressed Governor Macquarie that he gave her a further 600 acres (272 ha) of land at Parramatta as a reward.

It is amazing that Mary Penfold who ranks only second to Elizabeth Macarthur in founding a great Australian industry has no entry under her own name in the "Dictionary of Australian Biography". The Magill Estate gradually prospered through Mary's hard work as farm manager in all but name, since her husband was deeply involved in building up his medical practice and doing the rounds of his sick patients on horseback. A page from her day-book contains varied entries showing her bank accounts, payments to a man for additional ploughing, the purchase of new plough shares in Adelaide, receipt of cash, and other farm work, but most important is a statement "Began making wine", by the end of the 1860's Penfolds Wines had become a flourishing business, because of her husband's heavy workload Mary managed the business virtually single-handed, but this fact was not widely known for in colonial Australia a women was not expected to be in-charge of such a venture.

Australia has been variously described as "more a man's country than other industrial democracies". In 1880 Francis Adams, an English journalist on his first visit to Australia wrote praising the courage of the intrepid explorers and bushmen describing them as "men of the nation", he was fascinated by the new vast country and wrote — "the bush is the heart of the country, the real Australian Australia".

But like other writers he concluded that the Australian outback was

"No place for a woman"

The identity of women was seen through masculine interpretation of mateship and bush tradition. However on occasions we gained glimpses of life that was closer to reality.

Mrs Grogan, the widow in Steele Rudd's story "In the Drought Time" provides an example of a women who "cheerfully inherited the selection, ten children, a mortgage and a heavy bill to pay and the fence to mend and the ploughing to do. For a year she strained and struggled — put on a man's hat and shirt, cleared land, humped water, ploughed through the hottest day or tramped beside the harrow".

Barbara Bayston's story "Squeaker's Mate" described the heroine as being very different from the conventional image because she fells trees with the axe and cross cut saw, sizes them up for fence posts and rails and runs some sheep, and it is she who lifts the heavy end of logs and carries the heavy tools when Squeaker carries the billy and the tucker!

But the clearest view of the origins of joint venture between husband and wife is detailed in Joe Wilson's "A Double Buggy at Lahey's Creek".

"Mary not only persuades Joe to plant the crop that begins his run of good luck and prosperity, but also manages the preparation of the paddock for planting in his absence, without his assent and in spite of his initial reluctance." She wears her husband's clothes – even his new boots.

"I thought I'd make the boots easy for you Joe", said Mary.

It was Louisa Lawson (Mother of Henry Lawson, Australia's best known 19th Century story teller) who in the 1890's activated this pioneering spirit of so many women across the country by establishing the women's journal the *New Dawn* to communicate new ideas and establish the first Australian women's network.

Louisa was perhaps the first Australia feminist and was ostracised for some of her views about male power. When asked whey she hated men she replied, "I don't hate men, I just hate their vanity". Through regular columns in the *New Dawn* she encouraged women in rural and city areas to campaign for political representation.

Australian women have a strong activist tradition which can be traced from the colonial era of Caroline Chisholm to the suffrage movement of the 1880's and 1890's. Australia was the first country in the world to give women both the right to vote and the right to stand for parliament. But it would be inaccurate to interpret this initiative as reflecting the enlightenment of that era. Women themselves made strenuous efforts through a variety of organisations to focus attention on their right to vote, and this struggle lasted more than two decades. Women throughout the country campaigned for the franchise at State and Federal levels and eventually persuaded enough male parliamentarians to vote in support of women's equal franchise.

Audrey Oldfield reminds us that the campaign for the vote in the late 19th Century occurred at a time when Australian women were moving out of domestic service and taking places in the working place previously occupied by men. Therefore the ideas and organisations of the Australian Labour movement coincided with the debate about women's working conditions and wages, further strengthening the arguments for women's suffrage.

When in 1902 Federal parliament passed the Commonwealth Franchise Act, women were accused of being "social despots" who advocated a society of polyandry, free love and lease marriages. Furthermore it was argued that the women's vote would "sap the very foundation of a nation" and granting women's suffrage would lower the status of women and give married men a double vote, one speaker even predicted that by "passing measures of this kind we shall be training women to become masculine creatures and entirely unfitting them to discharge the functions which properly belong to their sex".

It is impossible to fully consider the situation of rural women in Australia without addressing the history of Aboriginal women and their relationship with the land the conditions of their dispossession. Aboriginal women contributed to the pastoral industry through their bush skills. They are the forgotten pioneers who worked as stockwomen, often dressed as men, with some stations being run entirely by stockwomen.

But the outback centre at Longreach, built to record the contribution of pioneers is called "The Stockman's Hall of Fame" and only recently began including exhibits of women's roles.

As a nation our memory lapses when considering the history of Aboriginal/white relations and it is unlikely that our museums will ever fully reflect the history of violence and rape, that Aboriginal women today still carry in their collective memory of the injustice suffered by their foremothers.

In understanding the bitter legacy of this period of Australian history we need to remember that the last official massacre was in central Australia in 1926 and Aboriginal protection policies encouraged the take of children from their families to be brought up by white families, missionaries or orphanages up until the 1960's.

Today Aboriginal women are speaking out and organising to protect their culture and to gain equal access to education, health, housing and employment. "Women's Business" that traditional contribution made by Aboriginal women is focussing on bush tucker and bush medicine and developing new approaches to self determination and other social issues in Aboriginal communities.

Rural women in Australia have been united and linked through the Country Women's Association. In 1928 the Q.C.W.A. asked that a small corps of police women be established in this State but the response was "It is the considered opinion of the Commissioner that the interests of women and children are being well looked after and policewomen would not ensure any greater protection".

It is interesting to recall that Mrs Fairfax, Foundation President of Q.C.W.A. said in 1922, "We are a great sisterhood of women and a democratic one, putting aside petty difficulties of position, wealth and pride we are out to be a mutual help to one another, the town to the country and the country to the town and there is plenty of room for improvement in this way".

And these comments are very relevant today — there is indeed plenty of room for improvement in this way.

Despite easier transport and communications and a range of new services for people in country areas, particularly the more remote locations are still disadvantaged by a failure of governments to fully appreciate isolation impacts of the needs of rural communities.

While both Federal and State governments have developed their decentralisation and support policies over the past ten years, there remains a need for an accelerated program of reform to upgrade the quality of life for people in rural communities.

One reform which could assist this process would be to initiate rural service for all public sector planners to sensitise them to rural and urban lifestyles.

Rural women are increasingly vocal in demanding long overdue recognition.

Rural women's networks and increasing participation by women at senior levels of rural industry groups has raised the profile of rural women in recent years with more women actively involved in policy development, lobbying and in entering local, state and federal parliaments. Australian local government at the regional level currently boasts an estimated 15-20% representation. The average for state and federal is lower, 10% in state parliaments overall, 8% in the house of representatives and 21% in the senate.

In Melbourne recently the Inaugural Women in Agriculture International Conference brought together 850 women farmers from 30 countries to share their experiences, the gathering ironically, the largest agricultural conference Australia has witnessed is expected to bring in a new era in farm politics.

"On a global scale, women do far more farm work than men, yet get far less recognition. By coming together we want to redress that," Ms Mary Salce, the Conference Convenor said. "Women often feel uncomfortable and unwelcome at traditional male-dominated agricultural gatherings. Such an attitude leaves women uninformed about new farm practices and unlikely to apply for senior representative positions."

Neither the National Farmers' Federation nor the Victorian Farmers' Federation have any women on their executives, a situation Ms Salce described as "absolutely shameful". Not that Australia is an exception, as the lack of representation of women farmers is a global problem.

The International Federation of Agricultural Producers, which is the only international body representing farm issues, has no women on its 15 member executive. The executive committee is an exact reflection of all national farming organisations.

Women's unpaid labour has never been fully calculated in considering their economic contribution to Australia's rural economy. Women's domestic and support roles in rural industries have been undervalued by both community and governments. Rural women not only work the double shift of many Australian women combining work within and outside the home, but they also accept a range of other responsibilities such as educator, accountant, driver, market gardener, poultry keeper, dairy hand, and farm labourer. In periods of financial hardship they may, in addition, work in the paid workforce of country towns, a super-human effort? — no just superwomen!

As Louisa Lawson wrote in June 1891.

"Will it be believed a hundred years hence that such a state existed?"

I hope it will not take another century for rural women to experience both a change of attitude and practice.

KEYNOTE ADDRESS

PERSPECTIVES OF "HEALTH" IN THE RURAL CONTEXT

Charles Alfero – New Mexico

I. PURPOSE

There are a number of factors that affect the "health" of rural populations, differentiating their needs and conditions from those of urban dwellers. Many of these factors also serve to hamper the delivery of health services in rural areas. Rural communities have been viewed as incapable of solving health care access deficits and have become reliant on urban resources to respond to their needs. The purpose of this paper is to explore a broad definition of health in the rural context and relate it to policy, practice and pedagogical (teaching) challenges in providing access to services in rural areas. (See Figure 1) In addition, this article seeks to replace unresponsive paradigms in health care with concrete concepts to assist communities in overcoming historical deficits across the three areas of consideration: policy, practice and pedagogy.

II. OVERVIEW

First, it is important to consider the broad definition of health beyond the physical or emotional condition. "Health is a positive concept emphasizing social and personal resources as well as physical capacities. Health is created and lived by people in the settings of their everyday lives."[1] In the rural context, health is challenged for the individual in isolation of social and financial resources accessible to many in more urban locations. "The aim (of Health for all by the year 2000) is to give people a positive sense of health so that they can make full use of their physical, mental and emotional capacities."[2] Developing and optimizing scarce social and personal resources in rural areas in support of personal and community health requires creative responses, especially since demographic and socio-political conditions exacerbate efforts at problem solving and policy development.

Responses to rural health concerns have focused on relying, not on curative, but rather "fixative" measures to respond to the health needs of the individual. (Fixative is used by the author to describe a medical intervention that does not solve the underlying cause of the physical or emotional condition) In the medical context bigger and more specialized health care is often considered better as rural communities have been considered "too small and not capable of managing their own health care"[3] Thus policy, practice and teaching institutions have supported a dependency model for health service delivery in rural communities forcing them to rely on, urban-oriented health policy, urban-based training models, corporate or large bureaucratic service delivery structures and specialized care incentives not easily supportable in sparsely populated areas.

In order to best address the needs of rural populations, the three areas under discussion: policy, practice and teaching, must develop in unison to move the system from urban dependent and individual medical provider dominated models to community accountable interdisciplinary health systems. Health systems, comprised of a variety of health professionals, including social workers, mental health workers, home health providers as well as primary care providers, in turn, must work through communities to effectively respond to the health needs of its citizens.

Ultimately, it is not possible for individual providers to be accountable for the health of the population. Nor can systems, whether entrepreneurial ventures or public bureaucracies, be accountable. They are not designed to effectively address the complex needs of the individual or family. It is the community that must bear the burden of ensuring the health of the population. Policy, practice and educational systems must support this premise. (See Figure 2)

III. PROBLEM IN ASSURING RURAL ACCESS

A. Rural Populations

In the United States and other places, rural populations are older and have higher rates of poverty than more urban populations. In New Mexico for instance, the population over 65 in non-Metropolitan Statistical Area (MSA) counties as a percent of the total population in those counties is 14.1 percent. (MSAs are a designation of urban areas with populations of greater than 50,000 individuals) The percent of population over 65 in MSAs is 9.9 percent. This difference has serious implications on the health service delivery needs of these populations. U.S. Bureau of Census estimated projections between 1990 and the year 2020 show a potential increase of 56.1 percent for the population over 65 and a decrease in populations less than 44 years of age. Should the urban/rural distribution patterns for the elderly remain constant or linear, there will be a disproportionate impact on rural communities.

Similarly, the average per capita income in non-MSA county populations is $11,900 in New Mexico. In MSAs, the per capita income is over $17,000. This equates to a 32 percent difference in income between urban and rural people.[4]

These post-wage-earner and income statistics translate to a lack of tax base and political voice for rural populations compared to their urban counterparts in addition to the impacts of age and income on health status. Further, the rural poor are disbursed geographically, economically and ethnically, providing less potential for influencing policy development as a cohesive group.

Rural children suffer from inadequate levels of immunization, and pre- or perinatal care. In New Mexico, the average percent of the population receiving low-levels of pre-natal care statewide is 15.3 percent.[5] The average for MSAs is 12.3 percent. Because of lack of access to necessary primary care services, individuals may delay treatment of other conditions until they require more intense, specialized and expensive services. In New Mexico, 71 percent of all primary care physicians, 72 percent of all nurse practitioners, 73 percent of nurse mid-wives and 60 percent of physician assistants live in MSAs representing only 48 percent of the population. To receive even primary care, people must often travel impossibly long distances enduring added personal hardship. The average distance between incorporated communities (cities) in New Mexico is 70 miles. It is not unusual to travel in excess of 100 miles for health services.

All or part of 30 of New Mexico's 33 counties are designated by the federal government as having a shortage of health professionals. Only 3 of these areas are defined as urban. Of the balance of the rural population, a full one half resides in shortage areas.

The population in New Mexico rose some 16.3 percent during the 1980's. However, rural communities are gaining populations at a much lesser rate. MSAs in New Mexico grew at a rate of 32.3 percent compared with 6.6 percent in rural areas during the same time. Thus maintaining local tax resources, industrial development opportunities, other economic or resource optimization and political power bases from which to develop responsive rural health policy are also on the decline. For the first time in New Mexico history, a coalition of urban state legislators can swing proposed policy and financing legislation in favor of urban areas. This obviously has horrifying potential consequences for rural health priorities in the future.

Because of these issues, there is a perception that rural areas must be dependent on more populated and resource rich communities to sustain personal health and necessary services. This dependency drains potentially available rural resources to urban areas. To exacerbate problems, travelling away from the community for health care and other services has a negative impact on the local economy, assisting in the downward socio-economic spiralling process. Given these perspective rural "health" may be a more difficult goal to attain.

B. Health Policy and Rural Health Service Delivery

Rural health services are inadequate. There are insufficient numbers of providers. They are not appropriately financed, nor are their personal needs being met. Health facilities are under-capitalized, and technology often falls behind similar urban settings both clinically and administratively.

Rural health services are fragmented. (See Figure 3) There are multiple entry points for people into an uncoordinated infrastructure that is often owned, determined, controlled and administered by corporate or governmental entities external to the community. As a result, resources that could be available for service provision in the community are diverted to urban settings in the form of administrative support or even profits that might otherwise be available for development. In many places, this has created a scenario where multiple organizations attempt to meet needs through a proliferation of unconnected "service-thin" providers, all competing for very limited public and/or private resources to support their corporate or organizational needs while only addressing categorical health problems.

Policy regarding the financing of health services has induced a shift in service delivery over time from rural to urban and from general to specialty care. Effective policy, practice and health professional training programs to ensure access to health care services in rural areas have eluded even the most economic and technologically advanced societies.

IV. IMPACT ON HEALTH

As stated earlier, health is a positive concept emphasizing social and personal resources lived by people in the settings of their everyday lives. In the rural context, attaining optimal health capacity is a challenge for the individual in isolation of adequate levels of supportive medical, social and financial resources. These same resources, however, may be relatively easy to access in more urban locations. Developing and optimizing scarce social and personal resources in rural areas requires creative responses and an approach more integrated in nature.

In "What it Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services"[6], the author discusses how policy and practice have failed our children in a number of ways including the following system problems:

- Most services are crisis-oriented
- The current social welfare system (in America) divides the problems of children and families into rigid and distinct categories that fail to reflect their interrelated causes and solutions
- There is a lack of functional communication between the system and the needs of children and their families

Thus, we cannot depend upon the traditional health system to improve the "health" or well-being of rural populations. While it is a critical component of a system of services, traditional health services are crisis-oriented and "fixative". That is, providers are taught to simply fix physical and emotional problems. Health services historically provide bandages but fail to respond to the underlying causes of the trauma. It is only when root problems are addressed in the community setting that the health system becomes truly curative. (See Figure 4) Sutures applied to the eye of an abused child is fixative and a quick fix at best. While there are times when fixative care is appropriate, policy does not support comprehensive solutions to complex problems when they are indicated.

In her work, Primary Care, Concept, Evaluation and Policy"[7], Barbara Starfield evaluates 10 industrialized countries based on a number of factors designed to assess the relative success of policy and practice in meeting the needs of people for primary care services. In her analysis only two in ten countries rank as "good" in terms of their ability to comprehensively respond to the peoples health needs. The balance rank poor to moderate or variable.

Consistently, those countries ranking poor in terms of comprehensiveness of primary care services also rank poor or moderate in terms of their health systems having a community orientation.

Systems must work through communities to organize services to improve the health status of the population. This entails the reduction of barriers to necessary services in favor of a comprehensive approach to delivery which mobilizes various community-based resources, not only to resolve immediate problems but to improve the social and environmental impacts on individual "health". This, then is the new definition of primary care and the implied direction for policy, practice and education.

In the rural context, an integrated and comprehensive health service delivery system is particularly critical because, as mentioned earlier, there are fewer resources and less support for additional resource development.

V. COMPONENTS OF HEALTHY HEALTH SYSTEMS

A viable and appropriate health system encourages the health of the people it serves as described above. The system is designed with this goal in the forefront. It measures its success by doing those things necessary to reduce the population's reliance on it for fixative measures. Traditional payment policies for health services have not embraced these concepts. However, they have dramatically affected the practice of medicine and in turn the design of training programs for health professionals.

Fee-for-service as well as cost-based and prospective payment system (Including Diagnosis Related Groups, DRGs) reimbursement strategies have provided inappropriate incentives for health service delivery. (See Table 1)

Most policy development and strategies have encouraged over-utilization as well as rapid development of specialty and tertiary fixative services provided by individual providers or large corporate or bureaucratic organizations which meet their financial expectations through goals and objectives supporting increased health service utilization. Some strategies have provided decreased utilization incentives and decreased specialization incentives. Other strategies, such as capitation (per person or member capped payments) and budgeting transfer the financial risk for service provision to the provider. Unfortunately, few strategies have served to create incentives for integrated services responsible for ensuring the health of the population. Only capitation provides somewhat of an incentive to address the "health " of the populace. However, corporate capitation strategies can be accused of limiting access to necessary services to ensure short term profit-making. In summary, financing policies alone do not ensure an appropriately responsive health system. Nor do financing strategies ensure that the "health" needs of the individual or family are being met, even if there is an adequate supply of services available. Who then can be accountable for the health of the public?

A healthy system of services responds to the needs of its clients through creative community development activities. (See Figure 5) Policy, especially financing policy, drives both practice and health professional education. It makes no sense to attempt to resolve inequities in health resource distribution or health status improvement, if policy supports the opposite goals of tertiary services and fixative care. Encouraging the development of integrated local resources in support of healthy people should be the focus of policy development. Financing strategies should include the following system development perspectives.

A. Person Development:

A challenge for teaching institutions and teachers is to develop programs supporting locally "grown" and trained primary health care professionals. This direction holds promise for improving health system responsiveness to meet the rural needs at a number of levels. At one level, in order to increase the likelihood of trained health professionals remaining in the community, programmatic development should be designed to minimize time away from the community. At another level, non-locally developed health care providers may not begin to understand the cultural or ethnic perspectives that influence health. Except in the most frontier of places, financing policy must insist on building from the ground up. It should reduce the dependency of rural communities on external providers as they may ultimately be a drain on resources that might otherwise be available to the community for service delivery. In fact, external providers may never be in a position within the community to respond effectively to individual or cultural problems or conditions.

B. Changing Perceptions of Quality and Capability

Because of historical deficits in rural service delivery, there is a perception that small places do not have the potential to deliver high quality services or develop comprehensive systems for people. There is a problem in changing this perspective because of a lack of policy advocacy. Another way for pedagogical pursuits to build rural infrastructure is to establish rural and frontier communities as interdisciplinary training centers. This is not only possible, but desirable, because as mentioned earlier, bigger is not better in health care. Health is a personal thing. Affecting the health of the individual is a complex task, often requiring a variety of specific strategies to enhance the capacity of the person.

In terms of practice, the community is the optimal level to develop integrated health systems. It is the place where people affected by health care policy decisions reside. Whereas in the past, it might be assumed that rural communities did not possess the capability to perform complex or high-technology tasks, technology and expertise is readily available through computer and other communications innovations and these can be designed to meet specific community needs.

C. Establishing a Strong Health Promotion, Illness Prevention Component

Health policy must provide incentives to educate individuals about things which they must do to maintain and improve their own health as well as the overall functioning of the community. When health systems benefit because they are accountable for health of the population served, then we will see the health of people improve.

In addition, systems must be accountable for the prevention of illness and be able to muster necessary resources that support this direction. Therefore, medical practice must expand its view to assist in the identification of factors which add to poor health and have access to a broad range of services to respond to individual conditions.

Teaching institutions support this perspective when they alter curricula to reinforce that the individual provider exists in a community of other providers and is therefore part of a potential system of services available to people.

D. Maintaining a Primary Care focus

Why primary care? Primary care services, in the broad sense, should encourage the use of interdisciplinary health care teams to meet the health needs of the individual. At a minimum, these health teams include social workers, family therapists, case managers and mental health professionals in addition to primary care physicians, mid-level and allied health service providers.

Primary care is predicated on early interventions to reduce the occurrence or progress of disease. These providers are the first contact that individuals have when entering the system.

As discussed earlier, financing policy has provided incentives to health service providers to provide more frequent, more intense or specialized services and to keep people in the fixative system longer. The measures of accountability for abuse of these incentives, such as utilization review are punitive in nature. Future policy directions should reward systems for early interventions as well as preventive service delivery to reduce health care costs while improving the health status of the population. This is particularly critical in rural areas where resources are already inadequate to meet the fixative health needs of the population.

E. Developing Appropriate Non-Community-Based Relationships

Since rural areas are dependent on urban partners for many specialty services, it is important that healthy relationships exist between them. This is best obtained from the perspective of grass-roots or bottom-up relationships for referral and support services. In competitive market models, the question should be; "Which urban or specialty provider(s) will provide our local health system the best service?" The policy perspective is often, "What do we have to do to meet the minimum needs of the rural population?" The former enhances the position of the rural health system. The latter, a dependency approach to assuring minimum care.

VI. HEALTHIER COMMUNITIES

Healthy communities are often defined in terms of the relative wealth of the people within them. Since rural agrarian and post-industrial communities do not possess the per capita financial resources of their urban counterparts, there is a perception that they cannot respond effectively to the needs of the populace. Healthier communities however, are better defined as those that enter into a conscious process to solve problems at a number of levels. (See Figure 6)

A. Developing Local Capacity

The famous American author Samuel Clemens (Mark Twain) once said that "The only real change happens locally". This is why the community should be an active participant in health systems planning and development processes. These processes should include providers of services and well as consumers. The goal of these processes should be to integrate service delivery programs and maximize limited resources in support of the health of the population.

To the extent that health services exist in the private sector, community efforts to create responsive and accountable health systems should move ownership into the hands of the community. To the degree that services are publicly owned, structures need to be established that hold bureaucracies accountable at the community level, not only for the services provided, but for the health of the population.

B. Inter-agency, Intra-community development

While community-based ownership issues are invaluable to the establishment of accountable health systems, community development activities involving a broad representation of the community are critical in terms of "Increasing responsiveness and accountability between systems and institutions located in the community, and internally between the leadership and constituency within each system serving a community".[8] Thus, communities must actively engage their health systems in an attempt to assure responsiveness to local needs. It is the dynamic interaction between community and systems needs that have the greatest potential for solving access problems and improving individual health.

C. Cultural Responsiveness

Even the most well-intentioned service delivery systems, if not integrally part of the local community, will fall short of responding the health needs of the population. Policy supporting healthier communities ensures active participation and ownership of the health system that is broadly representative of a full range of cultural and ethnic groups within the community. "First, possible leaders must be chosen and trained in community skills such as finance and administration. Only when the communities regain identity and motivation will the organization of community health become possible".[9] Remember that policy should support health systems working through communities to improve the health of the target population. Communities are defined by the characteristics of the people within them.

VII. CONCLUSION: ROLES OF POLICY, PRACTICE AND PEDAGOGY IN RURAL HEALTH IMPROVEMENTS

A. Health Policy

Health care financing policy must provide incentives for health services to shift from fixative to curative and preventive models of delivery. These models are not sustainable within a purely medical practice or teaching environment. The shift must be made to financing health in the broad social context.

Policy makers must pay for primary care practice including the various disciplines that support the full range of health needs of the individual including physical, emotional and social. Payment systems must support the training of primary health care teams and begin to blur the lines between providers to meet people's needs. Within the context of finite budgeting policy-makers must choose primary care over specialty services.

Neither corporate structure nor centralized bureaucracy are capable of meeting a rural range of rural health needs. Policy must mandate local control and decision-making. There needs to be a shift in policy thinking movers towards empowering communities. Rural inhabitants are survivors and fully capable of solving problems given adequate resources and permission.

B. Support Systems

Urban providers have a role in supporting the needs of rural areas for health services. Urban practices or systems can be partners through providing assurances to rural systems including

- Technical Assistance

  Urban systems, educational institutions and governmental agencies can offer rural areas various levels of technical assistance to assist them in sustaining an appropriate levels of services including systems development, practice management, financing strategies, organizational development, technology transfers etc.

  In addition, depending on the size and nature of the rural community, it is impossible to provides a full range of services to the population. Strong referral and follow-up relationships are necessary to meet the full range of needs of the individual. Urban partners are indispensable in this regard. The paradigm shift occurs when the decisions on what and who to refer to come from the community.

  Urban health systems and teaching institutions can provide manpower to relieve the burden of service provision in remote areas. This is important to prevent rural provider burnout and turnover. Support can come in the form of locum tenens services, tale-communications relationships, site visits and case support, etc.

- Pedagogical Support/Teaching Institutions Responses

  The shift in training must emphasize resource expenditures on primary care training. Primary care faculty must be raised in terms of their status within teaching institutions. They are after all the genesis of most referrals into the tertiary system. In addition, training must move from urban tertiary centers to rural-based experiences. These experiences must be interdisciplinary in nature as health teams become the basis for ensuring better health in the population.

C. Community Development

Rural service integration is critical to providing access to a full range of health services sustainable by the community. This will require substantial local effort and policy support as services are often entrenched in categorical organizational structures. These systems should be developed, owned and operated by the community.

In addition, if the ultimate goal of service provision is to improve the health of the population as well as ensure equitable access, financial incentives in the system must reflect this. Since large corporations or organzations have not responded effectively to these particular priorities, communities must develop as the point of accountability for improving the health of the population.

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TABLE 1: Payment Structures

Payment Structure Incentives in Health Care

	Frequency	Intensity	Duration	Accountability
Fee-for-Svc.	High	High	High	Utilization Review
Cost Reim	High	High	High	Utilization Review
DRGs	High	High	Low*	Utilization Mngmt.
Capitation	Low	Low	Low	U.M./Health Status
Budgets	Low	Low	Low	Utilization Control

* = While keeping hospital stays short, DRGs have created a substantive non-hospital based delivery system, also adding to increased health care costs.

Figure 1: Areas of Consideration for Rural Health

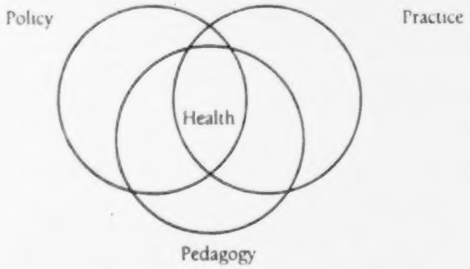


Figure 2: Shifting Perspectives

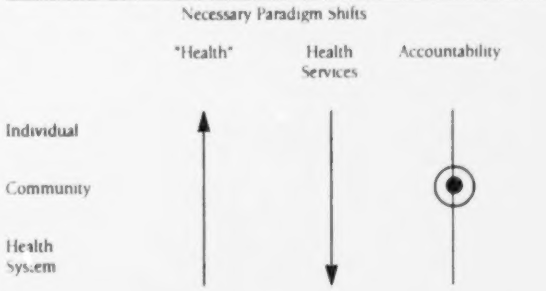
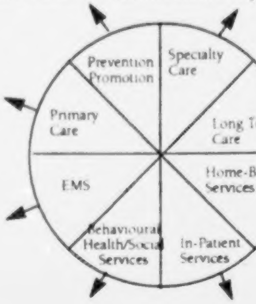


Figure 3: Fragmentation & Resource Drain

How is the Local Health Service "System" Organized?



Does it Matter?

Figure 4: Improving Health

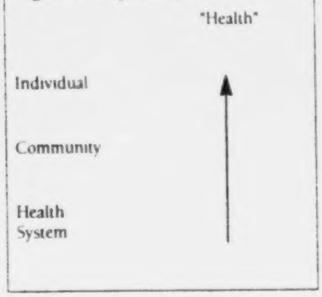


Figure 5: Community Health Systems

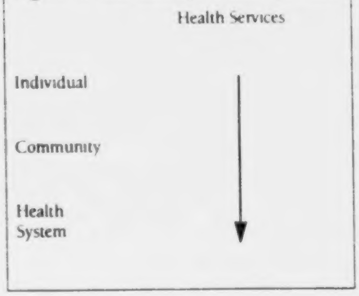
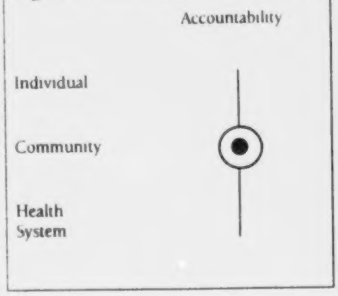


Figure 6: Accountable Communities



OCCASIONAL ADDRESS

RURAL HEALTH: POLICY, PRACTICE AND PEDAGOGY

Dr Peter Livingstone on behalf of Minister for Health, The Hon Ken Hayward

The topic I will address on behalf of the Minister for Health, the Honourable Ken Hayward, is '**Rural Health: Policy, Practice and Pedagogy**.' By this I mean the links between the Government's rural health policy framework, its commitment to improved practice by rural health workers and the importance placed on teaching as exemplified by our funding of the rural health training program, which embraces the Rural Health Training Units and Rural Health Training and Research network.

Rural health in Queensland is an issue that encapsulates all the complexities and prospects for shaping new ways of planning and policy making in the rural context.

In Queensland, the decentralised distribution of the population, the vast distances, and the cultural and historical circumstances of many rural and remote communities, present particular challenges in the planning and implementation of health programs and services.

This morning, I will outline how Queensland Health is combining the elements of 'policy, practice and pedagogy' through a series of initiatives to ensure optimal health for the people of rural and remote Queensland, foremost by involving local communities in addressing their own health needs.

Historically, the health care system has placed great emphasis on professionalism, but the recognition of consumer involvement is now evident in new models of health service delivery, and enshrined in Queensland legislation.

Consumer and community involvement is significant in health service planning and implementation for a number of reasons. As well as representing a cost-effective and efficient use of resources in a time of growing needs and competing demands; it is an important end in itself.

Active community involvement is correlated with better levels of individual health and a stronger sense of community and self-reliance.

In the rural context, metropolitan models and expectations of health care service delivery may not be directly applicable from the perspective of either consumers or health care providers.

The constellation of social, economic and environmental determinants of health, distinct from the health care system, are also more evident and perplexing in the rural setting.

Housing, sanitation, employment, income security, transport, community services and the supply of water and affordable fresh foods all impact directly and indirectly on the health of people in rural and remote communities.

Adaptive and responsive mechanisms which encourage a proactive role for local communities, and support health care providers in their role have to be put into place to improve health outcomes in rural communities.

This is the approach that Queensland Health has adopted through a series of legislative changes, new policy initiatives, and the implementation of a range of programs which encourage community involvement and provide appropriate preparation and training for rural health care providers.

At present, the health of Queenslanders in rural and remote areas, is comparatively worse than those in the rest of the State.

Mortality rates in rural populations from causes that are, in part, preventable and/or controllable are significantly higher than the State average in conditions such as ischaemic heart disease, cerebrovascular disease, hypertension, pneumonia, and other respiratory diseases, diabetes and alcoholism.

There is a higher prevalence and incidence of health problems associated with social conditions and lifestyle factors; such as poverty, isolation, lack of education, poor diet, smoking and alcohol and substance abuse.

Rural Queenslanders also face greater exposure to occupational and environmental hazards resulting in higher injury and accident rates, particularly motor vehicle accidents.

The incidence of stress, domestic violence and suicide as a consequence of cultural and social dislocation and rural recession are also evident.

Many factors influence the variations in the health indicators for rural and remote Queenslanders, including the diet, lifestyle and culture of the residents, the occupational risks associated with the rural sector and the presence of significant Aboriginal and Torres Strait Islander populations, who bear a disproportionate burden of ill-health in our community.

Rural people often have to travel long distances to receive or provide care. The traditional stoicism and self-reliance, which is part of bush culture, combined with the difficulties in accessing health services, may lead them to endure a condition rather than seek immediate care.

The problems of the poor health status of rural people, the lack of access and availability of the full complement of health services and the shortage and mal-distribution of health care providers in rural areas have been well documented.

Queensland Health has adopted a combination of structural changes and new policy directions, which are consistent with whole-of-government initiatives, to confront the dimensions of rural health needs.

The regionalisation of Queensland's public health care system is part of a statewide process to improve the delivery of a range of government services.

By devolving decision-making authority to the local level, regionalisation maximises responsiveness and client access to services, and provides opportunities for client input into decision-making processes.

The passage of the *Health Services Act 1991* established thirteen Regional Health Authorities with responsibility for the delivery of health services. One of the objectives of the Act is to ensure community participation in the planning and delivery of these health services to meet community needs.

In rural and remote communities, regionalisation enables the planning and delivery of services that are appropriate to — local needs by those directly involved the health care providers and administrators, assisted by the consumers.

As part of their strategic planning processes, Regional Health Authorities undertake extensive community consultations in order to identify local needs and priorities.

Consultative structures, such as local community consultative committees or health advisory groups have been established in all Regions to enable ongoing feedback on the responsiveness of their services.

The State Government's endorsement of a social justice strategy as a statewide priority has been instrumental in encouraging departments to improve community access to services and decision-making channels.

In Queensland Health, social justice principles guide the development of policies and programs across the spectrum of health services.

In particular, the release of the Primary Health Care Policy and Implementation Plan represents a dynamic change in focus for the Queensland health system and will have a major impact in rural and remote communities.

Primary Health Care can be considered as both a level of service, and as an approach to the organisation and provision of health care.

As an approach to health care delivery, it is uniquely suited to the needs and circumstances of rural and remote communities.

Primary Health Care is designed to establish a balance between health promotion, prevention, treatment and rehabilitation, as well as encourage individuals and communities to take responsibility for their own health status.

Fundamentally, it focuses on developing health rather than treating ill health! Contrary to some general misconceptions and misgivings, the Primary Health Care model does not foreshadow the loss of acute care facilities.

In the current budget, $6.2 million has been allocated for Primary Health Care Centres, particularly in remote areas.

Rural and regional hospitals have also received a significant boost with more than 40% of the capital works funding of $153.7 million being allocated to projects outside the south east corner of the State.

However, the role and structure of traditional rural hospitals are undergoing re-evaluation and change to reflect the need to provide a broader range of services. The Multi-Purpose Services initiative being developed by the States and Commonwealth is an example of these changes.

Such policy changes, as I have outlined, require that rural communities, including health care consumers and providers, have the knowledge, experience and confidence to be able to address their own health needs.

Attention to the skills base needed to support the changing professional and community context of the rural health care system is vital!

Last year the Queensland Government allocated over $2 million for the establishment of a Health Consumer Advocacy Network. The Network will operate in rural and metropolitan areas to skill consumers to enable them to have more meaningful and informed input into health planning and service delivery.

A particular emphasis in service delivery to rural areas has been on the support, education and training of the rural health workforce through the Rural Health Training Program. Since 1989, over $5 million has been committed to this program. Consistent with social justice principles, all health care providers, both public and private, in rural and remote Queensland, have a right to access the services of the Program.

The Program comprises the Rural Health Training Units and the Rural Health Education, Training and Research Network. It is based on cooperation and close liaison between all relevant parties, sharing information, program development and implementation.

The four Rural Health Training Units are strategically located in Townsville, Cairns, Rockhampton and Toowoomba to provide vocational training and continuing education to rural and remote health care providers. These programs have a strong multi-disciplinary and cross-cultural focus where appropriate.

The ultimate goal of the Rural Health Training Units is to enhance the recruitment and retention of appropriately trained health service personnel in all disciplines, to meet the health needs of rural communities.

The curricula developed for training programs and packages are designed to be acceptable to tertiary institutions, Royal Colleges and professional bodies so that qualifications gained by rural health care providers are recognised nationally.

The establishment of the Rural Health Education, Training and Research Network is helping to overcome the tyranny of Queensland's vast distances 'by using information and communication technologies to deliver education and training programs to rural and remote health care providers.

Clearly, the Government has an interest in achieving the cost-efficiency dividends of education and training initiatives for greater local community involvement in the health care system, but there is also a role for academic institutions.

A collaborative arrangement between Queensland Health and the University of Queensland's Departments of Social and Preventative Medicine and Psychiatry has seen the creation of the Queensland Primary Health Care Reference Centre.

The aim of the Centre is to raise the profile and level of understanding of primary health care and to provide resource base to a wide range of groups; including health care providers, educators, researchers, government and non-government agencies and members of the community.

The Centre will have a supra-regional focus, providing educational, consultative and networking services in all aspects of primary health care to each of the Regional Health Authorities.

Academic institutions need to be more responsive and innovative in addressing the education and training needs of rural health care providers, and the health needs of rural Queensland generally.

The introduction, by the University of Queensland, of a multidisciplinary subject in rural health care practice issues is a step in the right direction.

A much greater commitment is required on the part of tertiary institutions to ensure equity of access for geographically isolated students, particularly in the health professions.

The problem of the supply of rural doctors is often highlighted as symptomatic of the 'crisis' in rural health care. This situation will only be solved by an accumulation of carefully considered strategies that combine the elements of 'policy, practice and pedagogy.

In the long term, the Rural Health Training Units, the North Queensland Clinical School, Queensland Health's undergraduate scholarship scheme, continuing support for the University of Queensland's student placement program and the Queensland

Medical Education Centre, the Commonwealth's Rural Practice Incentives Scheme and other innovative efforts will all contribute to an increase in the supply of rural doctors.

In the short term, the $11.5 million Specialist Medical Staff package announced in the State Budget will increase the range and availability of specialist services in regional hospitals; reducing the need of rural people to travel to receive specialist treatment.

Conversely, a project being conducted by the Rural Health Policy Unit of Queensland Health reflects the promise of many initiatives in rural health.

The project aims to increase the number of rural students in tertiary health profession courses, particularly in medicine and the therapies, as a strategy to increase the number of rural health practitioners.

It operates by bringing together academically able rural students, who interested in a career in the health professions for a series of residential enrichment workshops to encourage and support their aspirations. These are the rural health care practitioners of the future!

Conclusion

Intersectoral collaboration and cooperative service provision, as encapsulated in the conference theme 'policy, practice and pedagogy,' are important for improved outcomes in rural communities generally, and imperative for improved health outcomes!

Unfortunately, in some cases, actual practice may not' reflect the rhetoric. It is important that we be extremely analytical about the way some approaches work and others do not.

In rural and remote communities, the best models of coordination and cooperation are found when orchestrated by the local communities themselves.

As policy makers, practitioners and academics, we have an important role to play in partnership with rural and remote communities in helping to address their needs.

PRESENTATIONS AND WORKSHOPS

THE SEED, THE SOIL AND SONG — EDUCATION AND TRAINING FOR RURAL HEALTH CARE

Max Kamien — Australia

Providing country people with a sufficient and appropriate supply of doctors depends on selecting those with an affinity for country life — the seed; encouraging their resolve through regular and appropriate clinical experiences — the soil; and contact with challenging role models — the song.

Rural students are currently disadvantaged in the matriculation stakes. Affirmative entry conditions are needed to level the playing field and to send positive messages to rural students about the possibility for a professional career and about the commitment of a University to its rural constituency.

The undergraduate experience must provide regular and appropriate rural contact to nurture the resolve of students for country practice.

The song requires a number of singers. Role models of rural practice who will challenge their potential successors to make it even better; Universities which value the rural practice or, at the very least, do not denigrate it; and student clubs which help reinforce the socialisation of students for rural practice and provide a counter-culture to the dominant ethos of a university which may work against the desire for rural practice.

In varying degrees, undergraduate education aims to produce a graduate with a broad understanding of medicine and the appropriate attitudes towards its optimal practice. Vocational training is to prepare these graduates to attain the clinical competence and confidence to undertake independent practice. Continuing medical education is the fertiliser that helps a professional to keep their knowledge and their skills up to date.

There is a dearth of research required to inform the process of education for rural practice. Much more work needs to be done on the effectiveness of affirmative action programs, the sociology of teaching in universities, medical schools and teaching hospitals, the effectiveness of teaching and learning in rural areas and how to nurture and improve it. Vocational training needs to examine the quickest methods to attain competence at the same time as safeguarding the rural public. Critical incident studies are one effective methods in pursuing this research. CME needs to be more concerned with active learning quality of care and to do more research in how isolated practitioners can maintain their levels of practical skills and competence.

RURAL FAMILY MEDICINE TRAINING IN CANADA

James T B Rourke and Leslie L. Rourke — Canada

ABSTRACT

Objectives. To examine the status of postgraduate family medicine training in the rural family practice setting in Canada and to identify problems and how they are addressed.

Design. A questionnaire sent to all 18 Canadian Family Medicine Training Programs followed by a focus group discussion of results.

Results. Nine of 18 programs offer some family medicine training in a rural practice setting to some or all of their first year family medicine residents and 99/684 first year family medicine residents did some training in a rural practice setting. All programs offer some training in a rural practice setting to some or all of the second year residents and 567/702 second year residents did some training in a rural practice setting. In 12 of 18 programs a rural family medicine block is compulsory. The education models for training for rural family practice vary widely. Isolation, accommodation and supervision are common problems for rural family medicine residents. Isolation and faculty development are common problems for rural physician-teachers. A variety of approaches to these problems are used by the different programs.

Conclusion. The 18 Canadian family medicine training programs provide a variety of postgraduate training models for rural family practice that reflect different regional health care needs and resources. There is no common rural medicine curriculum. Networking through a rural physician-teachers group or a faculty of rural medicine could further the development of education for rural family medicine.

INTRODUCTION:

Vast rural areas that have shortages of physicians contribute directly to the difficulty of providing adequate, accessible rural health care in Canada. Over the last decade the departments of family medicine in Canada have responded to the need for training for rural family practice by incorporating a rural experience for most family medicine residents in Canada and the opportunity for in-depth rural family medicine training for some <1> This study examines postgraduate family medicine training in the rural family practice setting in Canada with a view to identifying strengths and needs for improvement.

In Canada, students enter medical school after completing two, three, or more years of undergraduate university studies. Fourteen of the 16 medical schools are four years in length. The remaining two are three years in length. Family medicine training is provided at 18 family medicine training programs (Figure 1) as a two-year postgraduate program accredited by and leading to certification examination by the College of Family Physicians of Canada. <2> Family medicine block time during this two-year program varies from the prescribed minimum of eight months to a maximum of 12 months, some of which can be in a rural family practice setting. The remaining time is spent in hospital rotations and electives/selectives. An optional third year can be taken for advanced skills training in GP anaesthesia, emergency medicine, obstetrics, etc.

The choice of rural family practice as a career is dependent on many variables including rural background, medical school selection processes, rural learning experience during medical school and the quality and nature of postgraduate family medicine training. <1, 3, 4, 5, 6> Postgraduate education for rural family practice includes both appropriate in-hospital rotations and some rural family medicine block time. <7, 8, 9> Several Canadian models have been described. <10, 11, 12, 13 14> Our present study specifically examines the portion of family medicine block training that is done in a rural practice setting within the two-year family medicine training program.

Rural family practice settings can vary from communities with no hospitals to communities with a small active hospital. In the latter setting, family physicians provide most of the in-hospital care including emergency medical care, obstetrics and GP anaesthesia in addition to their office family practice, nursing home and home visits. <3> Most Canadian studies of rural practice use the Statistics Canada definition of rural which includes communities up to 10,000 population. Sometimes a geographic distance modifier is added. The 1992 CMA report on underserviced regions used distances of less than 60 km, 60-160 km and greater than 160 km from an urban centre of 50,000 people or more. <1> The 1993 Ontario Ministry of Health/Ontario Medical Association Agreement on Economic Arrangements provides for special CME and locum help for physicians practicing in communities of less than 10,000 people located further than 80 km from a major referral centre who population exceeds 50,000. In our questionnaire, rural practice and rural setting refer to "a community with less than 10,000 population".

STUDY OBJECTIVES:

1) To examine the present status of postgraduate family medicine training in the rural family practice setting in Canadian postgraduate family medicine training programs.
2) To identify problems and how they are addressed in order to determine strengths of, difficulties with, and possible improvements to postgraduate family medicine training in the rural family practice setting.

METHOD:

A five page questionnaire was sent in July of 1993 to the chairs/program directors of all 18 family medicine training programs in Canada. All were completed and returned. The results were presented to a Section of Teachers of Family Medicine Workshop "Successful Resident Teaching in Rural Community Practice" held in November 1993. This functioned as a focus group adding a qualitative dimension to the survey and forms the basis for the discussion in the paper.

RESULTS:

Models and Lengths of Rotation:

Total family medicine block time varied from 8 - 12 months. The timing of the rural family medicine block is weighted heavily to second year. Half of the programs offer a rural family medicine block to some or all first year family medicine residents. 99/684 first year family medicine residents did some training in a rural practice setting. All of the programs offer a rural family medicine block to some or all of second year residents. 567/702 second year residents did some training in a rural practice setting. In 12/18 programs a rural family medicine block is compulsory. Ten programs had short compulsory rural blocks - five for one month, four for two months, and one for three months. Two programs had long compulsory rural medicine blocks - one for four months and one for six months. Optional rural family medicine blocks ranged from 1-12 months.

Resident Acceptance:

Residents' ratings for rural family medicine blocks were reported as equal or higher compared to other family medicine blocks.

Resident Problems with Rural Family Medicine Block and How They Were Addressed:

The 18 chairs/program directors were asked to describe any problems or difficulties that their residents have with their rural family medicine training block and how these are addressed. The problems are summarized in Table 1.

The major problem was isolation. The programs listed a variety of different ways to address this problem. These included placing two residents at each site, regular phone contact with other faculty, establishing a resident "buddy" for monthly contact, a faculty adviser, return to base for combined learning and social sessions, computer and fax communications, on-site visits by rural co-ordinator and weekly base teaching sessions with a monthly support group for the "out of town" residents.

The next most commonly listed resident problems were accommodation and resident supervision. Accommodation will be discussed under the heading "program support" and supervision will be discussed under the heading "faculty development".

Problems or Difficulties for Rural Physician–Teachers and How They Were Addressed:

The 18 chairs/program directors were asked to describe any problems or difficulties that their rural physician-teachers have and how these are addressed. The problems are summarised in Table 2.

As with the resident problems, the major issue for rural physician-teachers was isolation.

The problem of isolation was partly addressed through faculty development which is discussed in more detail in the next section. Four programs listed communication with site visits and/or meetings by the rural program co-ordinator with the rural physician-teachers as other ways to address isolation.

Faculty Development:

The programs were specifically asked how they provide/encourage faculty development for their rural physician teachers. 17 of the 18 programs listed some funded faculty development programs. These are summarized in Table 3. Despite the variety of types of faculty development, in some cases the amount is summed up in one respondent's comment: "but I fear we do not do nearly enough".

Program Support:

The chairs/program directors were then asked questions on specific aspects of department/program support. These results are listed in Table 4.

DISCUSSION:

Successful rural family medicine education is dependent on a variety of factors including undergraduate experience, resident interest and background, the overall postgraduate family medicine training program, the rural family medicine block experience, the rural faculty, and program support. This study examined the portion of family medicine block training that is done in a rural practice setting within the two-year family medicine training program.

The information in this study of rural family practice training in Canada was obtained from questionnaires sent to the chairs/program directors of the 18 family medicine training programs. All 18 were completed and returned, eliminating concerns about non responder bias. The information supplied however, is limited in that it was not obtained directly from rural family medicine residents and rural physician-teachers. The would require a much larger study and resources beyond the scope of this project.

The Section of Teachers of Family Medicine Workshop "Successful Resident Teaching in Rural Community Practice" provided focus group qualitative validation of the questionnaire results and the basis for the discussion part of this paper. The discussion will be broadly divided into resident/learning issues and rural physician-teacher/teaching issues.

Resident/Learning Issues

A variety of factors contribute to the popularity and high ratings for rural family practice training. Generally residents are welcomed into the communities and feel more personally involved. The rural family practice teaching setting provides a diversity of clinical learning with a mixture of office, house calls, nursing home and hospital responsibilities including in-patient care, obstetrics and emergency work. In local hospitals they can have a more responsible role in patient care than in large tertiary centres where there are many other more senior residents. The typical one-on-one placement of a resident with a rural physician-teacher encourages Socratic mentorship and strong interpersonal relationships. Despite the popularity and high ratings for rural family practice training, our study results indicate a number of issues and problems that should be discussed and addressed.

Goals and Models:

The results show a wide variety of approaches to rural family medicine education among the 18 postgraduate family medicine training programs in Canada. There are no set objectives, curriculum or standard model for rural family medicine training in Canada. Experiences range from a brief one month exposure to the rural family practice setting to a twelve month in-depth contextual rural family medicine education. Most Canadian family medicine residents have some exposure to a rural family practice setting, mainly through compulsory one or two month second year rural family medicine blocks. This short experience provides a sample of the joys and challenges of a rural family practice and may encourage some to choose this as a career. It is too short, however, for the resident to develop a high level of responsibility within the rural family practice setting and does not allow an in-depth rural medicine education. With the short model, most of the family medicine learning is done in the traditional family medicine university centres. The short duration minimises the difficulties of isolation from families and peers.

The longer in-depth rural family medicine training models range from four months to 12 months of rural family medicine block time. Such a long rural placement is optional at most of the family medicine programs; at two it is compulsory. Because the rural placement forms a major part or all of the family medicine block for those residents, the education must go beyond a rural practice experience and cover the many general aspects and objectives of family medicine education. <2> This can pose a considerable challenge with the need for group learning activity and family medicine course work in addition to case-based experiential learning. In most cases, long rural family medicine training blocks are provided at the second year level. This allows the residents to develop general family practice skills, and do course work and group learning activities within the traditional university-centred family medicine teaching unit during the first year.

With the long rural placement model, resident group learning activities are important for educational reasons, and are essential for peer social support and interaction which is usually difficult or lacking in the rural setting. If the rural block residents are located within a 1-1/2 hour commuting distance of the university, course work and group learning activities can be provided through a half or whole day weekly group activity and seminar series at the university. When distances are greater, regularly scheduled two-day or longer resident conferences can be held either at the university or in various sites.

Isolation from Peers and Family

Isolation from peers and family is the most difficult problem for family medicine residents when in a rural practice setting, especially during long rural family medicine blocks. It may be particularly difficult for visible or invisible minorities and for residents with spouses or children who cannot move with them to the rural training setting. Having just completed a very social medical school experience, first year residents may have more difficulty adjusting to the rural practice setting than second year residents. The cost of transportation to ameliorate some of this isolation can be prohibitive for residents who are already deeply in debt from their previous educational costs. University/government support for return transportation can be crucial to the residents' acceptance of and benefit from rural based training. Adequate accommodation also needs to be provided. Other approaches include the development of a buddy system with other residents and the involvement of the rural practice co-ordinator and faculty advisers for the residents. Ready access to fax communication and computer communication bulletin boards can also be helpful.

The role of the community physician-teacher in helping the resident feel welcomed cannot be understated. The rural physician-teacher needs to be attentive to and supportive of the resident's various needs. This often involves helping the resident feel integrated, not only in the medical practice and professional community, but also in the community at large involving leisure and recreational activities. Residents, like other people, also have health care needs. While at times it might be convenient for the rural physician-teacher to provide medical care to the resident, this is inappropriate and can lead to a conflicting blurring of relationship boundaries. Alternative arrangements, however, must be facilitated.

Rural Physician-Teacher/Teaching Issues

Like rural family practice, teaching rural family medicine brings many joys and challenges. Teaching is an excellent, but sometimes humbling way to remain current in skills and knowledge, as the residents not only bring new ideas from their recent university training, but also often ask difficult questions. As the family medicine residents are often involved in patient care with physicians other than their supervisor, this can have a beneficial spillover effect for other physicians in the community. Rural physicians may become physician-teachers to add a mid-career interest and challenge to what has become for them, a comfortable routine. This does require some letting go and delegation of some direct patient care to the resident. For some this can be quite difficult. Many rural physician-teachers find having one resident at a time still allows them to see a significant portion of their patient visits while the resident sees some. This level of shared care tends to be reasonably accepted by the rural physician's patients as well, although patient "fatigue" for seeing residents can be a problem, particularly in practices where there is a high turnover of residents such as in the short one or two month rural experience model.

Faculty development is a major concern for rural physician teachers and their departments of family medicine. Some physicians find teaching easier than others, but for all it is a skill that can be developed. Teaching involves a body of knowledge and teaching skills that can be learned. This is particularly important for the physician-teachers who have residents with them for a long, in-depth rotation where they will be responsible for providing not only a rural experience but teaching the fundamental family medicine knowledge and skills. The rural physician-teacher needs to keep up to date in knowledge and skills not only in general family medicine but also in the fields of obstetrics, emergency medicine and sometimes anaesthesia which they practice. This can be a daunting task.

Fitting in necessary teaching and clinical commitments makes juggling of schedules more complicated. Obstetrics and emergency calls however, are in fact easier to handle with two pairs of hands rather than one.

Funding issues are an important concern. Several premises can be made. The rural physician teacher's total income and time commitment should be about the same as if not teaching. Some of the time that would be spent providing purely clinical work should now be spent doing teaching activities. This includes time for one-on-one clinical supervision or direct viewing or videotape review, patient chart reviews, joint rounds, tutorials and other scheduled and formal discussion time. The rural physician-teacher also needs time for faculty development and the necessary administrative and meeting commitments and hopefully some time for rural practice research to advance the discipline.

To be sustainable, funding needs to be provided for teaching and associated activities. Some of this comes from the residents' clinical earnings which generate teaching time; however the physician-teacher will be involved in supervising those patient encounters as well. Usually further departmental funding is required to make up the shortfall and also to cover the additional office expenses that are required when having a resident. These include additional staff time used in explaining teaching to patients and the need for increased office space. The Universities should provide videotaping equipment or the installation of one-way mirrors for direct viewing of residents with patients. In situations where the universities pay either little or no stipend , the rural physician-teacher may need to be less committed to teaching and residents are more likely to feel used as a locum within a less than optimum learning/teaching environment.

Isolation is also a problem for rural physician-teachers. While the rural physician-teachers have their own community support for clinical work and social activity, teaching is often a new interest and experience that may not be shared by other physicians in that community. It is very helpful if in each rural teaching community there are at least two physicians who share the teaching responsibility and commitment. This helps encourage shared development of this endeavour and provides a helpful sounding board during rough times. (It also gives residents more than one role model and a balancing view if the resident has conflicts with one physician-teacher). Communication by teleconference, fax and computer networking with other rural physician-teachers and the rural program co-ordinator is essential but no substitute for personal contact and site visits.

An ill, troubled or troubling resident poses a particular challenge in a long rural family medicine block situation. The rural physician is less able to go down the hall and readily talk to another experienced physician-teacher about the issue and may be tempted to become inappropriately over-involved as there are often limited local resources. Under these circumstances, the role of the rural co-ordinator is invaluable. Often site visits and discussions can help resolve the issues and underlying conflicts and both the resident and rural physician-teacher may carry on in an improved relationship. Depending on the troubling issues or illness, however, alternative arrangements such as placing the resident in another setting may be required.

CONCLUSION:

There is a shortage of family physicians in many of the vast rural areas in Canada. Education is a key factor in the recruitment and retention of rural physicians. Exposure to the joys ad challenges of rural practice encourages family medicine residents to consider rural practice as a viable career choice.

Providing some family medicine training within the context of the rural family practice setting is an important part of education for rural family practice. The Canadian family medicine training programs have responded to this challenge by developing a variety of models that integrate training in the rural practice setting into the two year postgraduate family medicine program. These vary from one-month compulsory rural family medicine blocks to fully integrated rural family medicine training models where all of the family medicine block time is contextual in the rural setting. This variety of models has developed in response to different regional health care needs and resources and provides residents applying for family medicine training positions the flexibility in choosing training models to best suit their learning needs and personal situation. This approach however lacks the cohesion of a common rural medicine curriculum.

Common problems with family medicine education in the rural setting include isolation, accommodation, and supervision for rural residents, and isolation and faculty development for rural physician-teachers. These are difficult to address but many positive strategies have been developed in the 18 family medicine training programs. Networking through a physician-teachers' group or a faculty of rural medicine could facilitate the development of rural practice education through the discussion of problems and sharing of approaches and solutions.

ACKNOWLEDGMENT

We would like to thank all 18 chairs/program directors of the Canadian postgraduate family medicine training programs for their completion of the survey. Thank you to the participants in our session, "Successful Resident Teaching in Rural Community Practice" at the Section of Teachers of Family Medicine Annual Workshop in November 1993 for their contributions to the discussion.

SUBMITTED FOR PUBLICATION TO CANADIAN FAMILY PHYSICIAN

FIGURE 1 Canadian Postgraduate Family Medicine Training Programs

University of British Columbia
University of Calgary
University of Alberta
University of Saskatchewan
University of Manitoba
University of Western Ontario
McMaster University
Lakehead University/McMaster University* (Northwestern Ontario Family Medicine Program)
University of Toronto
Queen's University
University of Ottawa
Laurentian University/University of Ottawa* (Northeastern Ontario Family Medicine Program)
Université de Sherbrooke
Université de Montreal
McGill University
Université Laval
Dalhousie University
Memorial University

* denotes affiliate university medical school

Table 1: Resident problems or difficulties (number of programs reporting)

Isolation (11)
Accommodation (5)
Resident supervision (5)
Travel (1)
Lack of intensive skill training (1)
Speciality education (1)
No hospital affiliation (1)

Table 2: Rural physician-teacher problems or difficulties (number of programs reporting)

Isolation (from University) (7)
Faculty development (5)
Inadequate compensation (3)
Integration of residents into community hospitals (1)
Patient acceptance and patient "fatigue" (1)
Time for supervision evaluation (1)
Dealing with "troublesome" residents (1)
Lack of feedback from program (1)
Developing sufficient academic activity (1)
Recruitment and retention of physicians-teachers

Table 3: **Faculty Development** (Number of programs reporting)

Annual or semi-annual retreat or workshop (11)
Funding for attending Section of Teachers of Family Medicine Conference (6)
Site visits (1)
Monthly teleconferences (1)
Masters level courses (1)
"Grateful Med" software and training (1)
University based department faculty development (1)

Table 4: **Department/Program Support**
(Number of programs answering yes to specific questions on program support)

Physician responsible for the rural-based component of residency program (16)
Specific secretarial support for the physician in this role (16)
Resident accommodation paid primarily by university or government (14)
Resident responsible for some or all of resident accommodation costs (5)
Rural physician-teacher responsible for some or all of resident accommodation costs (4)
Resident travel costs to and from university paid by university or government (17)
Videotape equipment paid for by university or government (11)
Physician-teacher travel costs to and from university paid by university or government (17)
Stipend* paid by university to physician-teacher in addition to the fee for service billing of the resident (13)

* The stipend varied from "peanuts" to more than $1,000 per month

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SCHOOLING, CURRICULUM, AND HEALTH

Jack Shelton — USA

The Program for Rural Services and Research at the University of Alabama (USA) relates resources of the University to rural Alabama communities through mutually beneficial partnerships. The PRSR also represents rural interests to the University. As a free standing unit within the Office for Academic Affairs, it established interdisciplinary association across the University and a variety of external partnerships to support its collaborative efforts with rural communities. Health is a primary concern of rural people in Alabama, and, therefore PRSR programs focus often upon health and include students in their implementation. Three activities are presented as examples of effective practice that coalesces student learning opportunities with strengthening community health. In the program examples described below, students from elementary through medical school have primary responsibilities. It is axiomatic in the programs that students are capable of imagining and completing serious work that uniquely contributes to rural health, and that the work creates and enhances strong academic and personal skills.

APPROACHES

The PRSR health-related work is guided by several approaches that inform program development, implementation, and evaluation. (1) Health results from complex and interrelated sources. (2) Health result from local initiative and from the use of local resources, including locally generated information. (3) Health results from collaboration.

(1) The health of individuals and communities results from complex and interrelated sources. It is obvious, though not necessarily acted upon, that air, potable water, and good soil are basic for human survival. Food, shelter and good work are determinants of well-being. Individual freedom and strong association, together with personal responsibility, knowledge and a sense of efficacy are foundation for good health. Medicine makes its own contribution particularly through immunisations and other preventive practices, information and instruction, and support of broad public health activities which are often environmental in nature. In terms of curricular or extracurricular activities, the varieties and interrelationships of health sources mean that PRSR projects will be necessarily interdisciplinary.

(2) Health is local. Health is not a commodity which can be simply delivered by an outside source. Perhaps health "care" can be delivered, but the language of extension tends to obviate the powerful roles of individuals and communities in determining their own well-being. In terms of rural communities, local initiative, resources, and information are crucial to their health. Within this emphasis it has been particularly important within PRSR projects for local students to be actively involved in the creation of formats for information collection and in the process of gathering and interpreting data.

(3) Health results from collaboration. Activities which improve the health of rural communities are likely to be the result of partnerships composed of representative local individuals and institutions and a variety of agencies and resource persons. One implication of the collaborative approach is that students often have the opportunity to work with persons from a variety of professions, thereby, gaining significant perspectives on possible careers.

PRSR RURAL HEALTH PROGRAMS

PRSR work is undertaken in collaboration with small communities in rural Alabama. None of the projects described below are being done in communities with as many as 1,000 residents. Some projects are in unincorporated areas. The schools involved range from approximately 25 to 75 students per grade. Rural Alabama is demographically and geographically diverse, and the projects are representative of that diversity.

The PRSR views small rural communities and their schools as an asset to the state. It holds that both schools and communities are competent partners in the creation and implementation of new models for and approaches to rural health and education.

STUDENT COALITION FOR COMMUNITY HEALTH (SCCH)

The SCCH is a student group sponsored by the PRSR. It was organized in 1974 and is based upon a model developed by students at Vanderbilt University. Similar organizations have been established at several other universities in the southeastern United States. All the groups have emphasized student initiative and capacity, and have generally worked with rural communities through locally inclusive partnerships.

The SCCH is composed of undergraduate, graduate, and professional students who collaborate with small rural Alabama communities to address community and individual health issues. Health fairs, undertaken in partnership each summer with three or more rural communities, are the principal project of the SCCH. The fairs are composed of activities intended to address a variety of individual and community needs and to provide a basis for improved community organization and action.

Health fair components. The health fairs include complete physical assessments done at no cost for all community residents. Regularly, in conjunction with the fairs, the SCCH does screening at no cost for children to be enrolled in Head Start, a pre-school support program. The assessments are performed by medical and nursing students trained and supervised by physicians. A lab staff composed of undergraduate students performs tests to screen for high blood pressure, diabetes, sickle cell anemia, cervical cancer, and other pathologies. The lab staff check for environmental problems especially those related to water quality.

The medical screening and testing are regularly undertaken over a two-week period in schools as the most suitable site since the fairs are intended to bring positive attention to the school and to build school and community relations. The school relationship to the work is underscored by the use of local student volunteers who often help with registration and who are taught to assist with some lab procedures.

The health fairs include reading programs for local children, and provide books for the schools and community. Developmental playgrounds and passive solar models for home retrofitting are often constructed. Health inventories and surveys are routinely developed and administered in collaboration with the community.

The communities provide room and board for the SCCH staff of twenty-five to thirty students and support professionals. The communities furnish the facilities which are needed for the various aspects of the fairs. Local volunteers provide guidance and support through a community health fair committee.

Health fair outcomes for students. Students are principal beneficiaries of the program. In the program university students live and work with persons in rural communities often providing a unique opportunity for learning across racial, economic, and cultural boundaries. For students from rural places the work provides opportunities for service and affirmation and often stimulates the consideration of eventual return to a rural community.

Students gain career-related experience and can obtain academic credit for their work. Because their work is hands-on and has immediate and serious application, students often say that the health fairs are the best leaning experience they have had. The work is important, and the factors which lead to success are complex. It tests students' capacity and judgement in a serious and public way. Expectations are very high, and the process has risk because the effort can fail.

Students must design and implement their work in collaboration with communities. They must secure and administer substantial funding and other resources which together range in value from $150,000 to $2,000,000 annually. There are no "cook books" and no "bosses" and all communities are different calling upon critical thinking skills. Their work and its results are inevitably reviewed both by the communities and professionals. The public outcomes have, over twenty years, proved student capacity and have been a source of pride and self-esteem for students.

Public outcomes. Community people and student participants alike point immediately to the fact that the physical assessments and lab tests have consistently identified serious problems. Lives have been saved and persons have been made healthier because of the fairs. And, in general, the processes of examination and testing have built into them opportunities for health education and the promotion of personal responsibility.

Communities are often drawn together by the health fairs and are positioned and energized by them to take action. Aided by information gathered from inventories and discussed in health fair related public formats, local people have undertaken long-term efforts to enhance their communities. The results include the opening or substantial strengthening of eighteen local primary health care clinics and the formation of area clinic networks. There are laundromats, libraries, parks, and water systems that are the direct result of the fairs.

The fairs and the efforts resulting from them have linked communities to necessary resources and to service agencies. They have been vehicles for meaningful connection between rural communities and institutions of higher education, including schools of medicine. Perhaps the two most important connections which often result from the fairs are those that communities make with their own inherent resources and with other communities. It is the latter connection which eventually led to the health inventory and shelter projects described below.

STUDENT HEALTH INVENTORIES

The twenty-year work of the SCCH was instrumental in focussing PRSR attention upon schools as the fundamental institution through which small rural communities could improve their well-being. The work, together with other PRSR rural education, efforts, led to the development of the PACERS Small Schools Cooperative, a statewide and inclusive collaboration formed to support and enhance rural schools.

With support from the University of Alabama, the Lyndhurst and Ford Foundations, and a variety of local and state partners, the PACERS Cooperative designed and is implementing a program to support schools and communities. The program is called "Better Schools Building Better Communities." It is intended to provide local high school and elementary students curricular and extracurricular opportunities to study, document, serve, and celebrate their communities.

Needs to be met. In Alabama and perhaps throughout rural America there is insufficient health related data. Very little information is produced by rural residents or for their use as a basis for local action. The production of rural health models, as opposed to the simple extension of urban models in rural places, will require information and perspective generated by rural people. This information need meshes with the needs of schools to insure that their students have the skills to gather and reflect upon information.

Project expectations. A section of the "Better Schools" program is specifically aimed at improving local health. A first step in that direction was the initiation of the Health Inventory Project (HIP) in 1993. Impetus for the project came from teachers' expectations that schools should inform themselves abut the health status of their students, including student knowledge about health-related matters. The implementation of HIP is emphasizing two basic propositions. (1) Schools are not simply "pass throughs" for externally developed information. They can and should be information creators and interpreters. As such they can take a pivotal role in the development of information formats consonant with local interest and need. (2) With support, local elementary and secondary students are capable of designing and administering instrûments for collecting significant data; of anlayzing the data; and of initiating appropriate responses. In summary, HIP expects participating schools to obtain significant information through student work which can be institutionalized within the school's curriculum.

Project description and progress. In the summer of 1993 students representing seven of the twenty-nine PACERS schools designed a comprehensive student health inventory that looked at such factors as nutrition, personal health habits, environment, personal relationships for support, abuse of alcohol and other drugs, and sexual activity. They were supported by teachers, university researchers and medical staff. It is important to note that the basic responsibility was with students. Adults were resource persons, and as a process ground rule they often could only enter the deliberations as a result of students' request for help. It was determined that students should be able to look upon the end product as a result of their effort. In the fall of 1993 the survey was administered to 836 students in grades 6, 8, 10, and 12 in seven schools. The results were computed a the University of Alabama and returned to students for their analysis and response. Schools indicated a strong interest in the results and planning for responses was undertaken.

Initial responses and plan. The responses of students and teachers to the results of their work in HIP in the 1993-94 scholastic year were promising and included plans for school-based CPR and first-aid training, blood pressure screening for students and elders in the community, and use of the process and information in required health instruction formats. One student in a remark representative of other participants noted that there was power in the right to gather, evaluate, and act on information.

The initial local plans were supplemented by project-wide goal established in the summer of 1994. The first goal was to respond to students' request for help with data analysis through the provision of software for analysis and training in its use. The second goal was to revise the inventory and to extend its use. As a result students invited all twenty-nine schools in the Cooperative to participate. Twenty-two schools elected to administer the inventory to all their students in grades 6-12. The scope of the initial project has been greatly expanded. The third goal was to pilot the use of the survey in required health curriculum in serval of the participating schools. A fourth goal was to seek additional funding for pilot projects undertaken by schools in response to the data they collected. And, finally, the results of the data will be analyzed by selected students and presented in a document reflecting on rural student health. The document will be released to media throughout the state.

Project Outcomes. In addition to the local plans and project-wide gaols mentioned above, HIP has other significant outcomes. Students have produced, in collaboration with medical researchers and other professionals interest in rural health, a format for collecting important rural information. As the project proceeds over time, it will give linear perspective with important implications for policy relating to rural health. And the project has given strong initial indication that students respond positively to the possibility of gathering and acting upon information.

SHELTER

The "Better Schools" program is intended to position young people to improve personal and academic skills though work that improves their communities. Adequate shelter is a basic community health concern for rural America. The maintenance of existing stock and the construction of affordable new houses are the major expressions of rural housing needs. There is a risk for contractors to build low-cost housing because the profit margins are too narrow. And often persons on fixed incomes do not have the resources to maintain their homes adequately. Low income persons find it difficult to secure loans for new homes or for renovation.

As a part of its program, the PRSR has periodically held workshops on the construction of passive solar greenhouses and water heaters as means to reduce utilities costs. These home retrofitting activities have been incorporated into the "Better Schools" program where many passive solar greenhouses are being build at schools to serve as labs and models for the community. In addition students are adding greenhouses to the homes of low-income persons. In 1992 the work was expanded to include student construction of new homes.

An inquirer asked several students in the new project, "Is this just another one of those house building projects"? A student responded with another question, "Have you ever built a house?" The answer appropriately intimates the complexity of house construction and the skills and habits required to complete such task. At a very surface level, it is obvious that such activity requires the capacity to measure and to calculate, a knowledge of angles and volume, and the ability to read blueprints and follow direction. The house becomes a lab and its construction an important process for learning and problem solving.

In the PACERS project, the inherent benefits in such an activity are being extended in several ways. (1) The project is being reviewed for its instructional possibilities across disciplines and grade level. Math and science opportunities are relatively apparent, however, there are strong implications for the study of government, history, and home economics. African-American teachers are particularly interested in relating the project to the loss of Black-owned land and other factors related to home ownership. A detailed building manual has been prepared, and it is being extended with new curricular materials and information relevant to home ownership. (2) Students gain important work experience and skills. They learn how to work with other people, and in the process, some of the students will earn money for extra work in the project. (3) The students and the schools are providing important and very public benefits to their communities in the from of quality low-cost housing. The model being constructed is a three-bedroom solar house with 1008 square feet. Depending upon the cost of land and water, the house price ranges from $25,000 to $30,000. The house is a model because of its very low construction and maintenance costs. (4) Community members are interested in the project and through it have important access to the school and its work. They regularly visit construction sites and compliment the young people on their effort and the school on the project. (5) Because of the house design and cost and the overall intent of the project, the Farmers Home Administration in the state is supporting the effort through low-cost loans. FmHA interest builds stronger connections between the agency and PACERS communities.

Summary

The projects described vary significantly in terms of the duration of their implementation. One is university-based and the other two are school-based. But they share several common elements that have made them successful. They have high expectations of young persons and set before them tasks that require strong academic skills and application. They create opportunities for meaningful and collegial association with skilled adults: doctors, nurses, demographers, carpenters, stone masons. The projects foster institutional connection for communities with universities and federal and state agencies. Throughout all the projects the process of schooling becomes relevant and specific as students actually make a difference in the health of rural communities.

TRANSLATING RURAL HEALTH POLICY INTO EFFECTIVE PRACTICE: BARRIERS AND SOLUTIONS

John S. Humphreys — Australia

ABSTRACT

Rural health is a major issues affecting all rural communities. Recently, considerable attention has been devoted to identifying ways of ensuring the provision of appropriate and effective rural health services. Often, however, good intentions fail to materialise into action due to failure to implement policies successfully. This paper examines the link between policy formulation and implementation, noting what effect the policy approach has in terms of contributing to its successful implementation. The paper then outlines a framework identifying the principal impediments to implementation success. A distinction is made between those impediments which might be considered internal to the policy process from those which operate outside of the specific policy itself. The National Rural Health Strategy is used as a basis for discussing the critical issues of how to translate policy recommendations into effective practice and programs which address rural health issues.

INTRODUCTION

The expressed aim of this Conference on Issues Affecting Rural Communities is to explore the relationship between rural education, health and community development for its implications for interdisciplinary, international and intercultural collaboration. Like the Regional Australia Conference held in Whyalla earlier this year, this conference presents a valuable opportunity to pioneer advances in intersectoral co-operation and collaboration. I would like to express my appreciation to the Conference organisers for their invitation to be part of this conference and to have the opportunity to facilitate and participate in today's workshop.

This workshop comprises three integral components. The first session involves three speakers. This session provides a backdrop outlining the importance of rural health policy, the link between policy formulation and successful implementation, and a framework identifying the principal impediments to implementation success. Two discussants will critically appraise the framework. The second session allows group discussion and analysis of ways to translate policy recommendations into effective practice and programs which address rural health issues. This session will focus on the proposals of the National Rural Health Strategy as a vehicle for implementing effective change and solutions to rural health problems. The final plenary session allows the reporting back to all Conference delegates of the outcomes and recommendations emanating from the workshop discussion.

WORKSHOP GOALS

Rural health is a major issue affecting all rural communities. The problems and issues characterising health and health care in rural areas are probably well known to this audience and certainly well documented elsewhere (AHMC, 1994; Humphreys & Rolley, 1991). This paper and workshop will therefore not focus solely on a discussion of rural health problems. Instead the aim of today's workshop which I have entitled Translating Rural Health Policy into Effective Practice:Barriers and Solutions is to focus attention on the process of policy implementation.

> "More attention to the implementation process in policy analysis is seen as a means of increasing the likelihood of policy formulation leading to action ... the recommendations of many reports on social policy issues would be made more effective by setting out not only *what* should be done, but *how* it should be done" (Howe, 1983, 127).

To date the issue of policy implementation is one that has been accorded too little attention (HOWE, 1983; GREEN, 1992). In reviewing progress of health policy it is apparent that all too frequently good intentions never materialise into action. As background to the workshop this conference paper is designed as a catalyst for discussing how to translate rural health policy into a sequence of actions designed to achieve specific goals and objectives. Specifically this paper discusses two aspects. First, what effect does the policy approach have in terms of contributing to its successful implementation? Secondly, what are the impediments confronting the successful implementation of policy recommendations?

The National Rural Health Strategy (NRHS) represents a set of nationally agreed principles, goals and priorities and as such provides a useful basis on which to discuss the issues associated with the implementation of rural health policy recommendations (AHMC, 1994). The background to and process underpinnning the formulation of the NRHS has been outlined elsewhere (Humphreys & Murray, 1994). Its public release in March by the Australian Health Ministers' Conference provides a timely opportunity to consider how the recommendations might be put into practice.

PLANNING FOR RURAL HEALTH

Before we turn our attention to examining how approaches to policy can affect its implementation and the nature and effect of barriers confronting this task, it is necessary to comment on the key concepts of health and health planning. How one views health will inevitably affect the nature of planning and intervention measures adopted. It is now widely accepted that health encompasses more than just the absence of illness and disease (WHO, 1978). Viewed holistically, the health of an individual or community is concerned not just with its physical and mental status, but also with the social and economic relationships that characterise the society of which it is a part. Health care, which includes public health services, personal preventive and curative services, is only one of several factors that influence health (AIHW, 1992; Humphreys & Rolley, 1994).

The significance and contribution of good health to the wellbeing of rural communities is readily apparent. The consequences of not addressing problems of illhealth cannot be underestimated. The inability of individuals to function properly, the trauma associated with suicide, domestic violence, alcohol abuse and injuries, as well as the unrelenting burden on carers create considerable personal hardship. From an economic standpoint, the community and society at large gain considerable benefits from a healthy population. A healthy and productive workforce and a stable and well-balanced population structure help rural economies to develop their own economic multiplier which serves to sustain the economic viability of the community. This in turn makes rural communities more attractive places to outsiders contemplating relocation from metropolitan regions. In addition, a healthy population reduces the high costs associated with providing extensive curative and rehabilitive services.

Optimal health, however, is unlikely to obtain without some form of public intervention since at least some if not all forms of health care are inappropriate for market allocation (Green, 1992). Moreover, many of the influences affecting adversely the health status of rural communities reflect shortcomings associated with dependence on the market place. The involvement of the state usually includes measures designed to modify the determinants of ill-health (public health measures), eradicate disease (preventive measures), and provide services for the treatment of sickness and illness (curative services). For this reason health planning plays a critical role in determining the availability and use of resources in relation to health needs. Health planning incorporates both formulation and implementation of policies. Whereas policy formulation provides the framework of principles and objectives that guide decisionmaking and activity, policy implementation refers to the strategies or explicit sequence of actions undertaken to achieve specified goals and objectives. Several policies such as the National Rural Health Strategy, the National Aboriginal Health Strategy and the National Mental Health Policy have been developed to guide health planning with respect to rural communities.

'Should be, could be, and likely options' — Approaches to rural health planning

Planning always operates in constrained circumstances. Variations in approaches to planning reflect in part the nature and extent of these constraints. Invariably some degree of compromise and pragmatism is required as theory (outlining what should be) and reality (outlining what could be) meet. Planning approaches which consider and attempt to incorporate the plurality of views and interests of all parties affected are usually characterised by a more restricted range of options regarding ways of addressing problems. On the other hand some degree of pragmatism brings with it a greater likelihood of successful implementation thereby ensuring that some of the proposed outcomes are achieved.

Health planning is necessary to guide the process by which scarce resources are allocated in order to achieve specific goals and purposes. In the case of rural health, the prime goal is the improvement of health for all rural inhabitants by meeting their health needs. The goal for rural health care is to ensure the provision of appropriate, accessible and effective health services for all rural Australians in order to improve their health status. In seeking to meet these goals several approaches to health planning exist. Green (1992) for example distinguishes between rational planning (in which a supposedly objective comprehensive assessment of all possible alternative courses of action is undertaken), mixed scanning (in which subjectively derived priority areas for planning are identified), and incrementalism (in which greater recognition of the nature and effect of different interest groups within the political context is more overtly incorporated into the planning process).

In practice, the health planning process is complex and rarely conforms strictly to any one approach. Rather a successful planning approach incorporates consideration of what is feasible in terms of resources and technical considerations as well as taking account of the opportunities and constraints characterising the broader political context. Typically the actual planning approach is characterised by the following stages - setting of goals, objectives and targets, assessment of the existing situation (including needs analysis), some assessment of various options for achieving objectives, translation of priorities and what is feasible into actions and programs, and monitoring and evaluation of how well objectives have been met. The process is more often cyclic than linear, involving several activities operating in parallel, feedback loops and some degree of self-regulation.

For the purposes of our workshop today it is useful to appraise the relationship between theoretical approaches to health planning and the reality confronting the formulation of the NRHS. The background to the NRHS is outlined elsewhere (Humphreys & Murray, 1994). The basis for the NRHS emerged from a review of the present situation with respect to rural health. This review examined the nature of health needs, the pattern, nature and organisational structure of health services, and their efficiency and effectiveness in meeting current and future health needs. Five broad areas emerged that warranted attention (Humphreys, 1994 forthcoming). Specifically the key issues in rural health were:

1. Identification of health care needs of rural Australians. Since health services can only be effective if they address the problems that contribute to ill-health among rural people, what are the health needs of rural Australians and their causal mechanisms?
2. Resource allocation and distribution. How best can we provide scarce health care resources in areas currently unserved, underserved or inappropriately served, and how can we ensure that mainstream programs are accessible and effective in meeting the health needs of rural residents?
3. Workforce issues. How can we best meet the education, training and support needs of the rural health workforce?
4. Human behavioural change. How can we reduce people's dependency on curative care and encourage them to take greater responsibility for ensuring that problems of ill-health do not arise?
5. Monitoring and evaluation. Since the actual contribution of health services to the public's health is not clear, how effective are intervention measures in achieving their objectives and contributing to improvements in the health status of people?

The process through which the NRHS evolved involved extensive collaboration between different levels of government and key rural stakeholders including consumers. From this process several priorities emerged which identified the major concerns of rural Australians. A series of proposals recommending specific action was formulated around these priority issues (AHMC, 1994). The involvement of such diverse groups and plural interests in the planning process invariably places limits on feasible options for action. (At worst it risks the danger that in seeking to develop a horse a camel results!) Nonetheless, it has the benefit of ensuring that priorities reflect the major concerns expressed by rural stakeholders and of maximising the commitment to and ownership of the policy proposals by all parties. The resulting NRHS represents a nationally agreed framework for action. The task now is to implement its recommendations.

Impediments confronting the successful implementation of policy recommendations

Failure to implement policies and strategies can come in several forms – non-implementation of recommendations, delayed implementation of any action, or implementation in a form other than that which was originally planned. The development of mechanisms for implementing principles of health care delivery is no easy task and involves the collaboration of many players. As Saltman (1994, 6) stated, "Health care providers and more recently consumers are familiar with the never-ending struggle to accommodate competing and conflicting views in negotiating effective health care structure with government modalities". Moreover, a variety of economic, political, socio-cultural, and environmental considerations limit the capacity of planners to implement actions designed to bring about change. The effect of implementation failure is that it often engenders considerable cynicism among target groups in relation to health planning.

Green (1992) claims that health planning activities are concerned with creating the future from the constraints of the present. So what are the constraints and impediments that limit successful implementation activities?

In some instances failure to implement policies (no matter how likely to bring about beneficial change) is unavoidable. Unforeseeable events or extraneous circumstances, such as economic depressions, wars and natural disasters, can significantly alter the circumstances, with the result that recommendations remain unfulfilled. In such situations, little can be done.

More often, however, failure to implement policies is the result of other reasons. In an article deserving much greater visibility, Howe (1983) considered some of the issues which contributed to what she termed the 'implementation gap'. These included failures in responsibility, community response, setting priorities, budgeting and staffing. While much of what currently occurs in health policy development has altered since Howe's article was published, her call for greater attention to be paid to how policy recommendations should be implemented still has considerable relevance a decade later.

Many interdependent factors influence the degree of success in implementing the recommendations and proposals of policies. While recognising that these factors seldom operate in isolation, it is convenient to distinguish factors which might be considered to be internal to the policy process (endogenous factors) from those which operate outside of the specific policy itself (exogenous factors). Table 1 outlines both sets of factors.

Table 1: Factors influencing the degree of success in implementation.

Endogenous factors

- *The nature of the problem*
  Rural health is characterised by an inherently difficult set of normative issues. For example, the determination of how much society wants to spend on health care is a moral as well as a financial decision. Related issues include ascertaining what

contribution health services make with respect to health vis-a-vis other determinants, the opportunity cost of spending more on health services; how, in the absence of ill-health, to influence changes in human behaviour; and how to operationalise goals and objectives that can appear as competing, conflicting and contradictory.

- *Policy design failure*.
  Sometimes the relationship between the outcome sought and the intervention strategy adopted is inappropriate. This can occur when the problem is poorly understood in the first place or when the policy provides only a partial solution because it was derived from too narrow an approach or a blinkered perspective.
- *The policy failed to define the implementation requirements adequately*.
  Some policies provide imprecisely specified details relating to the timeframe for action, who has responsibility for its carriage, priorities and pre-requisites, resource and cost implications, and the existence of an appropriate organisational structure.

Exogenous factors

- *Resistance to change*.
  Planning is all about change, and change inevitably has its losers and therefore opponents. Some groups may be ideologically opposed to certain proposals which threaten vested interests. The relative influence of different groups within existing power structures can significantly affect the nature and extent of change.
- *Political structural relationships*.
  Constitutional limitations, legislative difficulties and division of responsibilities between levels of governments and across bureaucratic organisations can limit the extent to which policy proposals can be easily and successfully implemented. Tensions between the States and the Commonwealth, different approaches and duplication of services can be barriers to policy implementation. Program boundaries may be too rigid and limit the scope for cross-program linkages, co-ordinated activity and integrated funding arrangements.
- *Economic factors*.
  Lack of resources can contribute to implementation problems. Shortage of resources, however, may not be just a function of demand but also whether the best use is being made of existing resources. Frequently the need to adopt better practices and to use resources more effectively is met with significant resistance by those currently commanding greatest access to scarce resources.
- *Lack of community involvement and support*.
  A poor relationship between organisations and their users and consumers can lead to a lack of commitment to pursue the prescribed course of action. Tokenism or unequal collaboration can contribute to resistance to the implementation of policy.
- *Changes in priorities*.
  The speed and complexity of change itself can limit the full implementation of program activity. Political events, particularly at budget and election times, can significantly alter the course of events receiving priority.
- *Was any action ever really intended?*
  Lack of commitment by the organisation responsible and lack of integration within and between departments and across programs can limit the likelihood of any effective action occuring.

(i) Endogenous factors:

Some of the reasons for planning failures lie in the planning process itself. Planning problems are inherently difficult to resolve (Rittel & Webber, 1973). Any planning which is based on an inadequate or limited understanding of the problem is unlikely to result in satisfactory outcomes. Moreover, because planning action invariably results in lasting impacts on its target audience, it is critical that the relationship between the problem and the causal or contributing factors is well understood so that the intervention measures chosen are both necessary (indispensible to solving the problem) and sufficient (adequate to solve the problem). Even when policies are based on a sound understanding of the problem, they can still suffer from design failure by not adequately prescribing the strategies required to translate recommendations and proposals into action.

(ii) Exogenous factors:

More often implementation failure results from a combination of factors which characterise the broader planning context. These include power structures and resistance to change, political and organisational arrangements, insufficient resources, and lack of commitment to the activity.

Clearly the context in which policy is formulated and implemented is complex, with many groups and interests vying for input and involvement. Despite an expressed concern with the public interest and extensive consultation with stakeholders, the nature of power structures and diversity of values can constrain the ability of planners to effect change. The plurality of interests affected by proposed changes inevitably results in some degree of opposition to policy implementation. This opposition often reflects the considerable political clout wielded by some groups. In some instances, failure to adequately involve consumers in the planning process has led to a pre-dominantly 'top-down' approach. For example, opposition to the proposed closure or redesignation of rural hospitals in some rural areas reflects in part the failure of health authorities to plan changes in conjunction with the communities likely to be affected.

Perhaps the most significant factor that limits the ability of planners to implement policies relates to the existing political relationships and bureaucratic structures. The implementation of national policies, often despite having the imprimateur of States and Territories, is impeded by the division of State and Commonwealth powers and responsibilities and legislation that restricts the capacities of health authorities to undertake action.

Another reason frequently cited as a cause of implementation failure is lack of resources. Scarcity of resources underpins most health care planning. Yet even an abundance of resources would not necessarily mean that the health needs of rural people would be met. Changed funding arrangements (such as the introduction of casemix funding) and increased concern with evaluating how health care services contribute to an improvement in health status of the community increase the focus of attention on efficiency and effectiveness in the use of existing resources and help to identify inappropriate and poorly targeted programs.

CONCLUSION

Over recent years considerable attention has been directed to overcoming the impediments associated with translating health policies into effective practices. Health authorities are now more aware of the pre-requisites for successful implementation of policies - including flexibility in planning options in order to cope with changing circumstances, adequate consultation and involvement by all those affected, suitable co-ordination of activities, the importance of careful timing, and monitoring throughout to ensure that objectives are being met and in order to avoid unintended effects.

In the case of rural health, ample evidence exists to demonstrate that health planning is concerned to implement policies which ensure that programs delivered are accessible and responsive to the needs of the community. Significant initiatives being undertaken by Commonwealth and State health authorities include the development of Rural Policy Units within State Health Departments, moves towards regional planning and integrated service delivery models, establishment of Rural Health Training Units, and specific measures designed to address the education, support and training needs of the rural health workforce. Despite these advances, however, much remains to be done - as the recommendations of the NRHS testify.

Critical issues underpinning the proposals recommended in the National Rural Health Strategy are the following:

- Given limited resources, should we limit the type of health care and treatment available to communities?
- How do we determine the local availability of health care services?
- How do we achieve a truely multisectoral approach to health care?
- How do we develop a health care financing system that prevents unnecessary intervention?
- How do we balance the need for social justice and equity with moves to increase efficiency?
- How do we balance the need for co-ordination and co-operation with competition engendered by the outcomes of casemix type funding arrangements?
- How do we relate organisational changes of health care with improved health outcomes?
- How do we ensure that communities can access mainstream programs and at the same time ensure that specific health needs of all rural people are met?
- How do we reduce the dependence of people on curative care services?

This address has provided a thumbnail overview of the main barriers which impede progress towards achieving the goal of optimal health for all people in rural and remote Australians. The workshop session which follows will allow us to consider some of these issues, focusing in particular on how national policy recommendations can be implemented. The critical task of the following workshop discussions is to consider how we can get around obstacles to implementation in order to bring about real and effective change in the way intended. Central to this endeavour is the need for and importance of real intersectoral activity. Health planning in isolation from education and community development is unlikely to achieve its goal of optimal health for all Australians. This workshop provides an important opportunity to address this issue.

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THE PROVISION OF SPECIALIST PROCEDURAL SERVICES IN RURAL AREAS OF AUSTRALIA

Peter Macneil — AUSTRALIA

ABSTRACT

The factual material and views presented are those of a general surgical specialist who has worked in the Riverina region of New South Wales, based in the public and private hospitals at Wagga Wagga Base Hospital and other district hospitals in the region for many years. The data assembled is from surveys carried out over the past ten years by colleagues in the Provincial Surgeons Association Australia and the Division of Rural Surgery of the Royal Australasian College of Surgeons.

Therefore, the following views are come from a specialist perspective, but, in many areas, particularly those of preparation for rural practice, continuing education and professional and social support of the factors effective provision of services apply across a wide range of rural and remote nursing and allied health professionals.

MEDICAL NEEDS OF RURAL AND REMOTE PEOPLE

Country citizens have stated that their paramount concerns in health care are, firstly, the security derived from adequate local treatment of acute illness and medical crises and, secondly, reasonable access to non acute medical, nursing and supporting health services. If travel of any distance is involved, this affects access progressively and will compromise the delivery and effectiveness of acute and continuing health care.

TRAINING AND RETENTION OF MEDICAL PROFESSIONALS FOR RURAL CAREERS

Suitable preparation of a procedural specialist to rural practice training will need to involve core skills of the profession to provide competence and a wide generalist base which includes sub specialty areas which would not be required of a metropolitan specialist. To attract and retain new specialists, a rural centre must provide the facilities and support staff which a specialist could reasonably expect in an urban setting, otherwise the application of his training will be very much reduced.

Retention of any members of the Rural Health work force will require professional support through his own college or association and this will be enhanced by a rural sub group within his own discipline. Continuing education is vital not only to maintain up to date competence, but it will promote the networking and the professional cohesion which is the key to job support. Adequate leave for recreation and continuing education in many cases will require the provision of a locum service and efforts to achieve this for both specialist and general practitioners and this has always proved difficult in spite of the efforts of some professional associations and other bodies.

A rural post will be more attractive to a young general practitioner or specialist if a career path is set out which will enable him to return to the urban scene after some years of service which may be a reasonable objective when a young family has grown to the stage of requiring secondary and tertiary education.

When special skills are discussed in the rural context at least 50% of the discussion is directed to the major procedural services of anaesthesia, surgery and O and G. In many contexts however the term specialist service is used to indicate one of the sub specialities, namely orthopaedics, urology, ENT, plastic surgery, paediatric surgery, vascular surgery and neurosurgery.

Much of the basic procedural care involved in general surgery, anaesthesia and obstetrics, that is the "Special Skills" can be safely and competently carried out by the well trained general practitioner and this is a part and continuing role in a large number of country centres. It may occur in sizeable towns which are not large enough to support a general surgeon. In other towns, there may be a similar role for a general practitioner who supports an excessive workload of the resident general surgeon in a similar way.

In many towns where there are only one or two general surgeons, they will, in a similar way, provide basic "specialist" or "sub speciality" procedures. This may supplement the service provided by a peripatetic sub specialist. Some country centres of course are large enough to have some resident sub specialist.

The determining factor in the range of these practitioners providing the specialist or sub speciality services will depend on the catchment population of the local hospital.

A district population of 8,000 will easily support hospital facilities to enable provision of anaesthesia, basic surgery and obstetrics by a trained group of general practitioners.

A population of 12,500 will justify and support the presence of a general surgeon. 25,000 population is required for an orthopaedic surgeon and the number increases progressively for the specialities of neurology and ENT, plastic and paediatric specialists to neurosurgery which requires 250,000 population (these are the specialist to population ratios which prevail at present in Australia and, although there is a degree of shortage in some sub specialities, the figures available are a satisfactory general indication of the local services required by a particular population size.) Maps of the individual states showing population size and the distribution of procedural specialists reveal reasonable provision of service in the large population centres. However, these maps demonstrate that there are many smaller isolated population centres of varying size where the service provision has been determined by the factors of available population and provision of service by either general practitioners or surgeons of various disciplines. These factors form a basis for informed judgements on the level and distribution of service provision in rural and remote areas.

It is pointed out that a small community of between 5,000 and 10,000, having a hospital with a team of general practitioners trained in anaesthesia and surgery, provide much enhanced security through the treatment of medical crises, acute illness and accidents than smaller centres which are without these facilities. It can be argued that, if such facilities are provided at the local hospital in circumstances, where they are not fully utilised five days a week, their presence is still very worthwhile for the community.

Similarly, the broad training of general surgeons in the basic procedures of the sub specialities will, in many situations, provide security through access to local service for non urgent conditions and lifesaving skills for emergency conditions.

PROVISION OF HEALTH SERVICES TO RURAL AND REMOTE AREAS

Steve Gordon — Australia

BACKGROUND

As you know Aboriginal and Torres Strait Islander peoples are still the most disadvantaged of all Australians despite the advances made in recent years. Overall, they still have the poorest health, lowest life expectancy, worst housing conditions and the highest unemployment rate of any group in Australia. In particular this situation applies to the many Aboriginal and Torres Strait Islander people living in rural and remote locations which lack appropriate health related infrastructure, amenities and services.

The overwhelming health problems faced by many Aboriginal and Torres Strait Islander peoples arise from a number of causes many of which cannot be resolved by simply focussing upon 'health' problems and solutions. Much of the government assistance which is provided goes towards tackling underlying problems such as housing, employment, education, and economic independence.

Historically speaking it is only a few short years since Australian governments and Australians generally have begun to address the catastrophic effects of some two hundred years of brutal oppression and maltreatment of the original occupants of this land. The significance of this is that despite the best efforts of both Aboriginal and non-Aboriginal people there is no easy quick fix and improvements will only occur gradually over an extended period of time.

Indigenous ill health is an extremely complex area involving long standing political, social, economic and cultural issues. The resolution of these issues will require a commitment to long term solutions, partnership and national reconciliation between indigenous and non-indigenous Australians.

THE COMMONWEALTH'S POSITION

The aim of Commonwealth Government policies is to assist Aboriginal and Torres Strait Islander people to overcome their disadvantage and enjoy full equality as Australian citizens. This includes access to the full range of government services normally available to the wider Australian population but often not available to indigenous Australians.

Increasingly, resources have been provided by the Commonwealth Government to Aboriginal and Torres Strait Islander community controlled organisations in recognition of the Government's policy of self-determination and self-management for Aboriginal and Torres Strait Islander people. In particular it is the Aboriginal and Torres Strait Islander Commission, as the centre piece of the Government's policy of self-management and self-determination for Aboriginal and Torres Strait Islander peoples, which determines the allocation of funds to these community controlled organisations.

ATSIC's 36 elected Regional Councils currently allocate a total of approximately $50 million annually to health projects including 92 community controlled Aboriginal and Torres Strait Islander Health Services throughout Australia. In addition to this ongoing allocation from Regional Council budgets, the Commonwealth Government allocated up to $232 million dollars in 1990 for the first five years of the National Aboriginal Health Strategy (NAHS). In its 10 May 1994 budget announcement the Commonwealth allocated a further $499.4 million (allowing for inflation) over the next 5 years.

As inadequate housing and infrastructure is a significant cause of indigenous ill-health, the Commonwealth Government directed a major component of these funds to housing and infrastructure.

It must be clearly and emphatically restated yet again that ATSIC alone is not responsible for overcoming the disadvantage of indigenous Australians. The provision of health services to all citizens is primarily a responsibility of State and Territory governments and for this purpose they receive general and specific purpose payments from the Commonwealth. In addition the Commonwealth provides programs such as Medicare through the Health Insurance Commission and a wide range of Department of Human Services and Health programs such as the Home and Community Care Program and the Disability Services Program.

ATSIC's health funding is intended to assist in the provision of supplementary programs which help bridge the gap between services provided to indigenous and non-indigenous Australians. ATSIC simply does not have the resources to do any more than this. ATSIC alone cannot meet the huge level of need that exists in Aboriginal and Torres Strait Islander communities.

In agreeing with the Commonwealth Government two years ago to a "National Commitment To Improve the Outcomes in the Delivery of Programs and Services for Aboriginal People and Torres Strait Islanders", State and Territory Governments have clearly recognised their responsibilities in providing services for indigenous Australians

Mainstream agencies and State and Territory Governments now need to meet these responsibilities. The failure of their programs to provide Aboriginal and Torres Strait Islander people with equity and access to appropriate and effective services has been well documented. Nowhere is this more the case than in the area of health.

KEY ISSUES

Empowerment

The disempowerment of Aboriginal and Torres Strait Islander people, as a result of the colonial occupation and the subsequent oppression of indigenous Australia, is the fundamental root of contemporary Aboriginal and Torres Strait Islander ill health. Consequently the empowerment of Aboriginal and Torres Strait Islander peoples, their participation in and control over the identification of needs and priorities and the planning, implementing and evaluating of appropriate responses to these needs and priorities, is of fundamental importance to effective health service delivery.

In particular the central advisory role of ATSIC's elected arm, as acknowledged by all governments in the "National Commitment To Improve the Outcomes in the Delivery of Programs and Services for Aboriginal People and Torres Strait Islanders", must be fully incorporated into any health strategy.

State/Territory Government Roles

The significant responsibility which mainstream State and Territory agencies have in the provision of services to all citizens, including Aboriginal and Torres Strait Islander citizens, must be clearly and unequivocally stated and re-stated time and time again in every forum where the issue of indigenous health is raised. This must be said in the context of underlining ATSIC's supplementary funding role, and advisory role as per the National Commitment document.

Recognition of need

The enormous, currently un-met level of Aboriginal and Torres Strait Islander need which remains to be addressed, and the important underlying economic, social and political causes of this need, must be recognised, accepted and acted upon. Conservative estimates suggest that $2 billion is needed to remedy the infrastructure needs alone of indigenous communities in Australia. This sort of challenge is the responsibility of all governments and State and Territory governments in particular.

Causes of ill-health

In aiming towards substantial and sustainable improvements in the health of indigenous Australians, the underlying causes of ill-health must be recognised and addressed. Disempowerment and dispossession, oppression and racism, poverty and unemployment, alcohol abuse, poor housing and inadequate infrastructure are some of the underlying factors which must be addressed.

Holistic Approach

Indigenous Australians generally have a perception of health as incorporating family and communal well-being, the maintenance of relationships and social responsibilities, and appropriate behaviour. Meaningful and effective health programs must not only work within this framework but must also address the various economic and infrastructure sources of ill-health. Consequently a holistic approach to health must be maintained within the framework of local Aboriginal and Torres Strait Islander perspectives and empowerment.

Long term perspectives

Given the breadth and depth of this currently un-met need there is a requirement for all parties to acknowledge that the need will not be overcome in the short term and to acknowledge the consequent necessity of long term perspectives and commitment. In particular there is a need for all parties to make a long term commitment to a partnership approach.

Partnership

If Aboriginal and Torres Strait Islander health needs are to be addressed effectively it is essential that all players recognise the necessity of a partnership approach at all levels. There must be a partnership between indigenous and non-indigenous players, there must be a partnership between medical and non-medical players, there must be a partnership between political and clinical or administrative players, there must be a partnership between governments of different levels and between governments and communities, and there must be a partnership between ATSIC and other indigenous community organisations.

National Reconciliation

Of central importance to the issue of partnership is the key role which the process of national reconciliation must play at national, communal and personal levels. The underlying causes of, and the solutions to, indigenous ill-health are so deeply embedded in this nation's past history and contemporary society that anything less than national reconciliation will severely limit the effectiveness of measures taken to improve the status of indigenous health.

Process Orientation

It is essential that in focussing efforts to address Aboriginal and Torres Strait Islander health service needs, both an outcomes orientation and a process orientation must be retained. In the final analysis outcomes or actual results are the significant reality for Aboriginal and Torres Strait Islander people. What must be recognised however is the impact which decision, implementation, evaluation and accounting processes themselves have upon final outcomes. Empowerment, partnership and reconciliation are three examples of such processes which are of vital importance.

Accountability

Health service delivery organisations must view accountability in its broadest possible sense. They must consider themselves to be accountable to both the local indigenous community and the wider community, as well as to funding bodies from the local ATSIC Regional Council through to the Federal Parliament. Central to the models of community control for Aboriginal health services and an elected political structure for ATSIC Regional Councils is the importance of social accountability to local Aboriginal and Torres Strait Islander communities. Added to this is the issue of full and proper financial accountability. Without impeccable financial accountability organisations representing indigenous Australians will continue to fight for the few crumbs dropped from the tables of governments and mainstream funding agencies.

Ethical Issues

The National Health and Medical Research Council document "Guidelines on Ethical Matters in Aboriginal and Torres Strait Islander Health Research" was approved by the NH&MRC in June 1991. ATSIC encourages all people involved in Aboriginal and Torres Strait Islander health to ensure that this document guides their activities in relation to research, data collection and collation and the interpretation, publication, ownership and control over findings and data.

RECENT DEVELOPMENTS AND FUTURE DIRECTIONS

ATSIC has been working closely with a range of peak health organisations to assist them in their efforts to raise the profile of Aboriginal and Torres Strait Islander health issues and to develop appropriate responses to these issues. Among these organisations are the Australian Medical Association, the Royal Flying Doctor Service, the Australian Pharmaceutical Advisory Panel, the Royal Australian College of General Practitioners, the National Rural Health Alliance and the Royal Australian College of Obstetricians and Gynaecologists.

ATSIC has also participated in the interdepartmental task force established by the Commonwealth Government in order to develop its response to the Burdekin Report on mental health services in Australia. ATSIC's participation is in recognition of the great need for culturally appropriate mental health services for Aboriginal and Torres Strait Islander peoples. A major purpose of ATSIC's participation in this task force has been to promote within other mainstream agencies an awareness of Aboriginal and Torres Strait Islander perspectives and needs in regard to mental health. ATSIC's aim has been to make these agencies aware of their responsibilities for Aboriginal and Torres Strait Islander people and to act upon these responsibilities.

The ATSIC Commissioners have met recently with the Minister for Human Services and Health to discuss ways in which Aboriginal and Torres Strait Islander health might be improved. Under discussion are possible joint working arrangements between ATSIC, the Department of Human Services and Health, the National Aboriginal Community Controlled Health Organisation and the medical profession.

WORKSHOP REPORTS

Monday: Health

Group 1 - Education and Training for Rural Health Care Practice

1. This Conference believes that
   (i) there is a bias in the curriculum delivery and assessment processes in the secondary school system which unfairly restricts the entry into tertiary courses of rural students, and
   (ii) where this bias can be demonstrated, universities and other teaching institutions have a moral duty to country people to introduce a counter bias (affirmative action) to redress this inequity.
2. This Conference notes the systematic and institutionalised pillaging of resources by urban interests and, conversely, a lack of will by urban-based governments to direct sufficient funds towards the equitable solution of rural problems.
3. The model of integrated funding support for rural medical training should also be adopted for rural undergraduate learning experiences of nursing, allied health and education professionals. This includes stipends for students and mentors, student travel and accommodation and intensive induction programs to facilitate both recruitment and retention in rural practice. This will enhance the catalytic infrastructure which supports rural development.

Group 2 - Schooling, Curriculum and Health

Researchers should make available, in forms useable by local communities, the information, indigenous skills, local examples and philosophies that they develop.

Group 3 - Translating Rural Health Policy into Effective Practice: Barriers and Solutions

1. The Commonwealth Office of Rural Health (ORH) recommended in the 1994 National Rural Health Strategy should be implemented at the earliest opportunity.
2. That the ORH promote the integration and coordination for funding and provision of rural health-related services on a national basis.
3. Measures to improve equity in various vocation and workforce policy should be developed . These should include shared use of National Satellite Education in Health programs and creation of a rural incentive program to help all rural health workers.
4. Consultation processes should be improved by including local community advocates within the policy formulation processes so that rural health policies better reflect community needs.

Group 4 - Delivery of Health Services to Rural and Remote Areas

1. When professionals are first appointed to rural locations, they should receive an orientation program to ensure their survival in that environment.
2. Professionals in a rural community need support and a network of other professionals, as well as continuing education for the provision of their professional knowledge and skills in the community.
3. Professionals need incentives to go to the bush, including a clear career path for working in rural communities.
4. Special programs should be developed to sell to the professional the personal advantages of working in the bush.
5. There is a need to educate other professionals on the contributions that Allied Health Professionals can make to rural health.

Group 5 - Indigenous Health

1. Community controlled health care services should be provided.
2. Mainstream health services should include culturally appropriate approaches.
3. State Governments should be accountable for funds supplied for Indigenous health.
4. International models of management and control of indigenous services should be available for consideration by local indigenous communities.
5. Indigenous Health Workers should be recognised as integral members of the health team.
6. Emphasis should be placed on action-oriented services.
7. Culturally appropriate mental health services should be provided.
8. Interpreter services need to be provided in the health systems for indigenous people.
9. Racism in the health systems needs to be recognised and its role in decision making minimised.
10. Culturally appropriate medical processes should be introduced in medical education programs.

PAPER PRESENTATIONS

TRAINING FOR RURAL PRACTICE: THE WAY AHEAD

Thomas Doolan and Mrs Anna Nichols — Australia

ABSTRACT

The design and implementation of advanced training curricula for rural medical practice was initiated by RACGP (through its Faculty of Rural Medicine) in 1992 in three procedural disciplines - surgery, anaesthetics and obstetrics. Parallel with further curriculum design, the first three curricula were implemented in 1993 and subjected to a national evaluation. This study, in conjunction with the establishment of the Directorate of Rural Education and Training (RACGP), has provided a unique opportunity to assess the implications of providing this type of program and the practical requirements of the training settings with respect to personnel, resources and support. This paper outlines the issues emerging from the first year of advanced training in accredited posts and what this will mean in terms of planning, organisation and support for the teaching setting.

INTRODUCTION

Over the past few years there has been a concentrated focus throughout Australia on rural communities and their health needs. The literature regarding these needs indicates major deficiencies in a number of areas, one of these being education and training opportunities for rural health professionals. Inadequate education and training have been clearly identified as key issues in recruitment and retention of rural doctors.

It has been observed that "if the doctor's training has not made him basically competent to meet the needs, it is unlikely that he will continue in rural practice",[1] and further that "shortage of medical manpower in country areas is most directly related to inadequate preparation for rural practice".[2] The Doherty Report has brought this shortage of rural doctors and problems with rural health services to the attention of the public and government.[3]

In accordance with this, a review has recently been conducted to ensure that the National Rural Health Strategy is directed towards achieving optimal health for all people in rural and remote Australia.4 The Strategy looks at the identification of existing health services, and the extent to which they effectively meet rural health needs. Further, there is reference to ensuring that the particular skills and educational needs of rural health workers are met through adequate training and support programs. In terms of final objectives, it is intended that there will be a fair distribution of health resources and equitable access to essential medical services for all rural Australians.

Rural practice is medical practice outside urban areas where the location of the practice means the doctor needs to have, or to acquire, procedural and other skills not usually required in urban practice. A good rural doctor must be a good general practitioner sharing the clinical and consultation skills of an urban doctor. However, because of the limited access to specialist services in rural areas, rural practitioners must also be competent in the delivery of any secondary and tertiary care also required. There is now a clear recognition that rural practice is in fact different from urban practice, and requires a discreet set of knowledge and skills.

With the recognition of this major distinction between urban and rural practice came attention to appropriate solutions. One example is the observation made by Craig and Mudge[5] that there is a need to develop a coordinated approach to:

- Recruit (identify and select) suitable candidates
- Identify and teach the skills required for competence (in rural practice)
- Teach those skills in context (in a setting which will foster confidence in their performance and promote interest in rural practice)
- Support existing (and future) rural practitioners to retain their services

Clearly there is also a need to nurture rural students in order to improve potential recruitment, considering that these students should be the best source of rural general practitioners. Previous studies have found that students from the country have a high likelihood of returning to practice in the country, but historically not many have applied or have been accepted into medical courses.[6] Positive recruitment strategies by Rural Health Training Units in some states are beginning to reverse this situation, for example South Australia and Western Australia.

Predominantly, rural general practitioners enjoy their work, but there is often dissatisfaction over protracted working hours and difficulties in finding locums. Procedural work is an important part of rural general practice and increased access to training opportunities in this area is necessary for undergraduates and graduates who wish to become rural general practitioners. Country life can provide good community support and status for a doctor as well as a challenging sense of professional independence. City general practitioners have devolved from the country practitioner mould and shed their procedural skills. They have less accessibility to hospitals and may have less income but enjoy better facilities such as choice of education for their children and the availability of locums.

General practitioner to population ratios according to the RaRA Classification and based on 1992-93 Medicare data indicate progressive shortages in rural areas.[7] The capital city and other urban ratios are around 1:1100, rural major 1:1300, rural other 1:1800, remote major and remote other 1:2000. When other factors such as the complex nature of medical services provided, dispersed pattern of rural populations and levels of morbidity in remote communities, the true extent and significance of the shortage becomes evident.

The identifiable rural doctor shortage in Australia is currently around five hundred, on the basis of advertised positions and other recognised situations of need. If the shortage is considered from the perspective of rural general practitioner to population ratios, it assumes even greater proportions. Better undergraduate and vocational training of the rural medical work force may eventually provide rural Australians with adequately staffed medical services.

However, this begs the question: Is there any point in training rural doctors to safe competent skills levels when operating theatres in rural hospitals are being systematically shut down across the country? The number of rural doctors practising obstetrics and anaesthetics has fallen by almost 40% over the past five years[8] due to the stripping of acute care facilities from country hospitals, clinical privileging and indemnity issues and the lack of opportunities for skills upgrading and retention. This then raises a further question: Why are our rural communities not entitled to equitable access to operating theatres and other acute care facilities compared to our urban population particularly considering the enormous rural contribution to the Australian economy[9] and our demonstrated proven high standards with respect to rural medical procedural outcomes?[10]

The literature suggests three recurrent themes:

- There is a need for specific vocational training for rural practice, especially in procedural skills, and a need to reward those who complete such training
- There are continuing difficulties in providing this training, especially in providing suitable hospital posts
- Rural doctors and their families have needs other than education, which must be satisfied if rural areas are to be properly serviced. Their needs include professional, social, family and financial support, and in particular, locum relief.

In response to these and other needs, state Rural Doctors' Associations developed in the late 1980's culminating in the formation of the Rural Doctors' Association of Australia (RDAA) in February 1991 at the first National Rural Health Conference in Toowoomba. Dialogue also began at this conference between

RDAA and the Royal Australian College of General Practitioners (RACGP) which led to the formation of the Faculty of Rural Medicine (FRM) of the RACGP in April 1992

The propositions of Craig and Mudge have proven central to the development of an effective educational strategy for rural practitioners (including undergraduate, vocational and continuing medical education). It has been the RHTUs, and their associated rural doctor training programs which have provided form and direction to this strategy.

Educational programs in the past have shown limited recognition of the special needs and qualities of rural practitioners. Initially, rural-doctor training programs were established independently to address this issue by providing specific vocational training for rural practice. Advanced rural skills curricula are also being developed by the FRM by defining procedural and other skills necessary to practise competently in a rural environment. To date, advanced curricula have been developed in Anaesthetics, Obstetrics and Surgery, with Aboriginal and Torres Strait Islander Health underway. Paediatrics, Psychiatry, Emergency Medicine and Adult Internal Medicine are proposed. Similarly, an integrated core curriculum for the first three years of rural training is under development.

CORE CURRICULUM FOR RURAL TRAINING

Core curriculum was considered in detail at a conference held at the DRET in December 1993 11 The principal considerations were felt to be:

- Comprehensive nature of Rural General practice
- Capacity for safe and competent practice in isolation
- Unreasonable expectations of trainees if clear guidelines not provided
- Constitutes need for well-defined, rural training program with common content requirements
- This equates to a core curriculum, i.e. that which rural doctors require in terms of knowledge, skills and attitudes
- Development requires consultation with an input from all stakeholders

The essential design elements which require incorporation were perceived as:

- Problem-based learning approach, i.e. focus on patients' presentation
- Integration of discipline-specific content and themes, ie., "strands and slices" concept
- Encouragement of self-directed learning and familiarity with distance education systems
- Focus on graduated responsibility
- Understanding of the functional rural GP network
- Role of RHTU as primary locus of organisation and delivery of rural components of learning
- Clinical skills logbook documenting requisite experience and certified competency by supervisors
- Concept map to ensure essential areas covered
- Alternative means of addressing areas where problem-based teaching is inappropriate
- Consideration of current Training Program content to avoid duplication
- Emphasis on rural multi-disciplinary health team approach

Core curriculum for rural training is currently being advanced by the Faculty of Rural Medicine Training Working Party in consultation with the relevant stakeholders.

ADVANCED RURAL SKILLS CURRICULUM DEVELOPMENT AND EVALUATION

One of the most significant issues impacting on the rural community is the provision of quality health service. This is, at its most effective, a team effort, with medical, health, social and community services operating within a cohesive framework. The position of the rural general practitioner in this team is pivotal and, as has been evident from studies conducted over the last ten years the undersupply of rural doctors continues to limit some rural communities equity of access to many medical services. While the doctor is not the sole provider of health care in the rural team, a medical presence affects the pattern of health practice across the board. It determines in many respects, the use of hospital facilities in the area and forms a key link for rural people with specialist and support services beyond the local area.[11,12]

These issues are well documented, as is the shortfall in the rural medical workforce.[3] In addressing the task of attracting and retaining a greater number of doctors in rural Australia, studies have identified social factors, financial considerations and family background among a range of attitudinal issues affecting a doctors individual decision to undertake or to remain in rural practice. However the consistent thread running through the majority of work in this field, is the doctor's clear identification of adequate training and preparation as the key factor in affecting the decision to practice in a rural or remote location and the most significant reason why the ensuing practice can be undertaken with confidence.[14,10]

In investigating the medical disciplines which most immediately impacted on a doctor's ability to serve the needs of the rural community, research in Queensland in 1992, led by Professor Richard Hays, clearly identified surgery, anaesthetics and obstetrics as the three areas in which rural doctors requested further training. These findings were supported by earlier work in WA by Professor Kamien, in Victoria by Professor Roger Strasser and in SA by the Committee chaired by Dr David Gill.[8,15,16]

In response to this need, The Royal Australian College of General Practitioners (RACGP), initiated in 1992, the development of Advanced Training Curricula[17] in Surgery, Anaesthetics and Obstetrics, with principal input through its newly formed Faculty of Rural Medicine. These training curricula were developed in consultation with the relevant Specialist Colleges and endorsed by these bodies, in addition to RACGP College Council. Their development was funded through a grants from the Department of Human Services and Health, Rural Health Support, Education and Training Program. The curricula formed a world first both in the form of this training initiative and in the way it was developed, through close consultation with partners in a number of Specialist Colleges.

In 1993, the task remained to implement these curricula in accredited training posts throughout Australia. While the curricula have been developed by a process that included wide consultation, it is only on implementation that their adequacy and practical use can be determined. The rationale for the development of the Rural Medicine Curriculum Evaluation Project[18] included the provision of a means by which a comprehensive process of information-gathering could be instituted to guide potential changes required to the curriculum documents. Furthermore, as partners in a new venture, the Rural Training Posts required national support personnel to assist in the establishment of the training which was in this case, provided by the Evaluator together with the Director of Rural Education and Training, when this post came on line in September 1993. Basically, information was required to indicate how well the curricula and their means of implementation meet the needs of rural trainees. These requirements, both of new trainees and of returning rural doctors must be met if the program is to contribute the provision of appropriately trained GPs in rural areas.

Integrated activity by a College Working Group established Interim Accreditation in parallel to the design phase,[19] in order to produce over the first year, a number of posts in which the standard of teaching, the quality of facilities and resources and the training/ service mix, supported the provision of effective training for rural trainees. The posts were available at registrar level, for both trainees within the existing rural training stream and for established rural doctors who wished to undertake further training in one of the three disciplines offered

Training is currently being undertaken in posts associated with Rural Health Training Units, the number of posts currently accredited, nationally is as follows

Rural Training Unit	Discipline	Number of posts	Commencement
Bendigo	Obstetrics	1	1993
Cairns	Anaesthetics	3	1993/1994
	Obstetrics	5	1993/1994
Horsham	Obstetrics	1	1994
Modbury	Anaesthetics	1	1993
	Surgery	2	1991994
Moe	Anaesthetics	1	1994
	Obstetrics	1	1994
	Surgery	1	1994
Rockhampton	Anaesthetics	1	1994
	Obstetrics	1	1994
	Surgery	2	1994
Shepparton	Obstetrics	1	1994
Tamworth	Anaesthetics	4	1993/94
	Obstetrics	2	1993
	Surgery	2	1993/94
Toowoomba	Anaesthetics	2	1993
	Obstetrics	1	1993
	Surgery	1	1993
Townsville	Anaesthetics	1	1994
	Obstetrics	1	1994
WACRRM	Anaesthetics	2	1993
	Obstetrics	2	1993
Wagga Wagga	Obstetrics	1	1994
	Surgery	1	1994

Of these posts, 33 are currently filled – 7 in surgery, 14 in anaesthetics and 12 in obstetrics. Twenty three of these are Rural Training Stream trainees.

The means of evaluating the implementation of advanced training has been developed through a series of extensive field visits to all training sites and consultation with trainees, hospital and general practice supervisors, hospital and RTU administration and education staff. The work has been monitored through an Advisory Committee which includes among others the Secretary General RACGP, the DRET and the Chairman and Censor of the Faculty of Rural Medicine. Through these means, it is intended to provide a balance of input from both training personnel and the administrative and medico-political framework which supports them.

The advanced curricula have translated well into practice. Information collected during the implementation review endorses the process of design with the documents receiving approval from both supervisors and trainees. The content is viewed as appropriate to and realistic for the requirements of rural general practice and there is general approval of the suitability of training relationships between trainee and supervisor recommended by the curricula, which impinge on the degree of experience, developing autonomy and levels of responsibility. The training is developed on practical experience, a real-work situation, one-on-one teaching and consultation and continuous assessment and feedback.

The mostly provincial hospital settings associated with the sites of the Rural Health Training Units provide a broad and relevant caseload and casemix, enabling supervisors to offer appropriate experience both to the specialist trainees and the advanced rural trainees.

Equally important to the continuing success of this training venture, is the work undertaken during 1993/4 by RACGP Committees to clarify and document the procedures for selection, assessment and certification, and by the office of the DRET to open lines of funding and support for the training posts.

The first year of a major training innovation will naturally have its challenges, but the progress has been remarkable in implementing a national training initiative in the 10 Rural Health Training Units. The challenge now is to consolidate the flow of trainees and the availability of posts. A longitudinal study is in place to chart the progress and destinations of the graduating doctors and their contribution to procedural services in rural practice. Much of this work would not be possible without the outstanding contribution of both hospital and GP trainers and without the enthusiasm and commitment of the rural trainees. Our thanks go to them, and to RHSET for the provision of funding.

RURAL TRAINING STREAM

Negotiations between the FRM and the RACGP Training Program have led to the establishment of the Rural Training Stream (RTS) of the Training Program this year which, in addition to the education and training opportunities provided for all general practice vocational trainees, will provide rural trainees with

- Four years training for rural practice, including a minimum of twelve months in rural general practice, six months of which will be in basic and/or advanced general practice terms
- Twelve months in Advance Rural Skills Posts (currently available in Anaesthetics, Obstetrics and Surgery)
- Specific educational activities/events focused on rural general practice
- Assistance with securing the necessary training and clinical experience to prepare the trainee for rural practice. This might include preference for hospital and special skills posts in disciplines important for rural practice as well as preference for relevant courses.

RTS trainees are required to be enrolled with the relevant state Training Program office, and enrolled or affiliated with the RHTU in their current region.

RTS trainees for 1994 number 140 nationally from the January intake and potentially 170 after the July intake. It is anticipated that over 200 are likely in the Rural Training Stream by 1995.

DIRECTORATE OF RURAL EDUCATION AND TRAINING

The Directorate of Rural Education and Training (DRET) was established in September last year to facilitate rural medical training at all levels. It is part of the national office of the RACGP Training Program and is located in Brisbane. The Directorate is half-funded by the Rural Health Support, Education and Training Program (RHSET) of the Federal Government and half by the Training Program of the RACGP.

The Directorate is staffed by a full-time Director, personal assistant and a temporary evaluation officer. Additional medical educators, research/project officers and administrative staff are essential if the Directorate is to fulfil its objectives and address the needs of a growing Rural Training Stream. If the rural medical workforce needs are to be met in the medium to long term, then around 500 RTS trainees will be required at any one point in time, (with a graduating cohort of 125 per year). This equates to one quarter of the total RACGP Training Program numbers of around 2000 at present.

Key objectives of the Directorate are

- Development of the RTS including integration of the activities of RHTUs and the Training Program
- Promotion of rural undergraduate initiatives particularly emphasising contact between rural trainees and rural doctors
- Advancement of rural continuing medical education, relocation training for urban general practitioners and reskilling opportunities for rural doctors

RURAL HEALTH TRAINING UNITS

Rural Health Training Units (RHTUs) have been established across the country over the past three years as a logical and spontaneous response to a vacuum in training opportunities for rural health professionals20. As rural health care has come to be recognised as a discreet discipline, so has the need for specific rural health educational programs. RHTUs are rapidly assuming a central role as the developers and coordinators of such programs and the obvious loci of their delivery.

RHTUs have now been established at Toowoomba, Townsville, Cairns, Rockhampton, Tamworth, Wagga Wagga, Moe, Launceston, Modbury (Adelaide) and WACCRM (Perth). Other potential sites include Tweed/Murwillumbah, Orange, Dubbo, Bendigo, Warrnambool, Whyalla, North-West Western Australia and the Northern Territory.

The focus of RHTUs vary considerably depending on a range of factors including:

- Regional influences and priorities
- Discipline-specific emphasis
- Infrastructure arrangements
- Funding sources
- Relationships with local health services
- Associated educational institutions
- Professional support networks

Most RHTUs, however, share some common characteristics, roles and objectives:

- A multi-disciplinary approach to educational activities, reflecting the rural health team model of service provision
- Regional location, facilitating contact between rural trainees, educators, patients and service providers
- Coordination and supervision of appropriate rural training posts in hospitals, practices and other locations
- Educational programs focusing on health care in the rural context
- An educational philosophy oriented towards interdisciplinary participation and vertical streaming (i.e. involvement of trainees at all levels -- undergraduate vocational training and postgraduate)
- Contribution to rural health curriculum development
- Production of distance education packages and involvement in delivery of distance education
- Collaboration with other educational institutions such as universities and professional colleges
- Promotion of rural health careers amongst high school students and university undergraduates
- Implementation of other rural undergraduate initiatives including rural term placements, mentorship schemes, rural student clubs and education programs
- Facilitation of continuing rural health education activities e.g. workshops, satellite broadcasts, distance access to library resources
- Coordination of relocation training for urban health professionals and re-skilling posts for rural service providers
- Organisation of locum services
- Research in the areas of rural health problems, rural practitioner skill requirements and rural health education methodologies

Sources of funding for RHTUs have been various and usually multiple. These include the Federal Government through RHSET, state public health sector contributions, universities, local government and private sources. The Federal Government's Rural Incentive Program is likely to have a future role in relation to funding for rural undergraduate initiatives, urban GP relocation training, rural GP re-skilling and rural locum programs. Rural Divisions of General Practice are looking to RHTUs as potential providers of rural continuing medical education (CME) programs, and thereby represent a likely additional funding source.

Measures of success are difficult to estimate because of the brevity of programs to date, but those available indicate:

- High quality, highly relevant educational programs [21]
- Greater coordination and supervision of appropriate hospital and practice rotations [21]
- Significant increase in junior staff levels at provincial hospitals with related flow on to rural general practice [21]
- High level of acceptability of the overall process by trainees and providers [21]
- High level of knowledge and skills demonstrated by the small number of medical graduates to date, all of whom have located to rural or remote practice[21]
- 140 RTS trainees are enrolled in the first intake for the first year of this program, including 43 trainees in advanced rural skills posts[21]
- Considerable success achieved by those RHTUs which have focused on measures to increase rural high school student intakes into medical courses [21]
- High degree of response amongst medical undergraduates to the efforts of those RHTUs which have promoted rural undergraduate courses, rural practice placements and rural student clubs [21]

SUMMARY

In summary, this paper describes the current situation of training for rural medical practice in Australia, how this was achieved and raises a number of issues in relation to the way ahead. It is worthy of comment that no equivalent process appears to be in place in any other country at a vocational training level, and therefore comparisons are difficult. Issues which require consideration include:

- A permanent facility to monitor rural health professional resource needs and allocation.
- A strategy to ensure retention of acute care facilities, particularly operating theatres in rural hospitals so that trainees who are skilled up to meet rural community needs and the rural community themselves can mutually benefit according to social justice principles.
- Support for completion of curriculum development for rural medical training. The fact of advanced rural skills curriculum development in the areas of anaesthetics, obstetrics and surgery, together with the imminent curriculum for Aboriginal and Torres Strait Islander Health in 1995 in no way diminishes the importance of completion of the task. Definition of core curriculum for rural medical training, as well as the development of advanced curricula in emergency medicine, psychiatry, paediatrics and adult internal medicine have already been determined as critical areas requiring immediate address [21]

  Continuing support for evaluation of curriculum implementation. This is a key issue without which objective evidence of the effectiveness of rural training cannot be measured.
- Further development of the Directorate of Rural Education and Training. With the necessary growth of the Rural Training Stream comes a commensurate need for additional resource allocation for the DRET if the process is to remain coherent and achieve desired objectives.
- Ongoing assistance for Rural Health Training Units. These are the obvious loci of rural health training programs and are proving to be central to the success of the process thus far.

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PRECEPTORSHIP – A MODEL FOR VOCATIONAL EDUCATION IN UNDERGRADUATE PRE-REGISTRATION RURAL NURSING STUDENTS FOR NURSING SKILL ACQUISITION AND EXPERIENCE.

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ABSTRACT:

Attracting and retaining health professionals to rural areas has been acknowledged as a major problem in Australia. The majority of health professionals are educated in metropolitan tertiary institutions. The problem with this is that these health professionals are then educated in health care settings which are different to rural, and the health professionals themselves are not aware of the challenges and satisfaction of working with rural communities. The University of New England's School of Health is attempting to address this problem. The undergraduate pre-registration nursing students are all placed in a rural hospital. Under the new district system, the students are exposed to the different levels of rural practice (base and district hospitals). In addition, the nursing students are preceptoed with registered nurses who are considered to be excellent role models for best rural practice. The program has been operating for a twelve month period and the results of the evaluation of the program suggest that the students, the preceptors and the hosptials all benefit from this model of learning. This paper outlines the rationale for the program and its strengths and weaknesses. The model can be easily adapted by othe rural metropolitan tertiary insitutions to achieve the same outcomes - improvements in the competence of practitioners and an interest and desire to return as graduates to rural health care facilities.

INTRODUCTION

Nursing is a practice discipline which incorporates education and research. Skilful practice is founded in nursing action which utilises the nurse's knowledge base, problem-solving skills and critical reflection (Pearson 1993).

Nursing graduates, when they enter the workforce, can find the idealised role differs from the role expected in the workplace (Itano, Warren & Ishida 1987). Thus a program which recognises that undergraduate pre-registration students need help to develop competence in the work world while retaining the professional values learned in the tertiary setting is essential. One way of achieving this is to provide opportunities which allow the student to practice in the work environment (Itano, Warren & Ishida 1987). This can be achieved in several ways - a day placement, blocks of placement, with or without direct supervision from a chosen clinical supervisor.

The models of clinical practicum placement in Australia have separated the tertiary and service settings. Thus, students often have had difficulty making the links from theory to practice because they lacked practitioner models (Kirkpatrick, Byrne, Martin & Roth 1991). Additionally, students very often perceive academics as theoreticians unable to practice nursing and practitioners as technicians unable to relate theory to practice (Blazek, Selekman, Timpe & Wolfe 1982).

In rural areas, hospitals and health services have had difficulty in attracting and retaining health professionals. The reasons for this are many and varied, including lack of educational opportunities, lack of employment for the partners, feelings of professionals isolation and difficulties in accessing continuing professional education (Blue & Howe-Adams 1993). An additional problem is that of vocational training. Studies have shown that students from city-based universities are less likely to move to rural areas to practice (Hays, Acklin, Cahn, Davis, McAllister, Murphy, Romanini, Williams and McEwan 1993). As such, the National Rural Health Strategy (1994) states

Academic institutions need to be more responsive and innovative in

> *meeting the education and training needs of rural health care providers*

and

> *a greater commitment to ensure that more traning for all health care providers be made available in rural areas, including educational support in the form of training visits, would help address rural health workforce needs*

DISCUSSION

In 1993, the School of Health, UNE, Armidale established three clinical schools. These clinical schools are located at three hospitals from the former New England Region of New South Wales - Tamworth, Taree and Armidale. Each clinical school was a collaborative venture between the service centre and the School of Health.

Collaborative approaches are not new in Australia but are usually the result of a School of Medicine within a health setting rather than nursing. Such approaches recognise that education and practice are essential and equal contributors to quality health care delivery. It implies that the parties have separate, but equal, input into the venture. The success of the venture requires good communication (Kirkpatrick et al 1991).

The formation of the clinical schools was based on the view that understanding of nursing is best achieved through the interpretation of experience. Thus, if students are exposed to the expert practice of clinicians and are able to reflect upon it, then the knowledge they acquire through this type of practicum experience will empower them to begin expert practice in their discipline (Pearson 1993). Additionally, undergraduate students experiencing practicum training in rural areas, are more likely to return to the rural area to practice (Hays et al 1993). Thus, the model of preceptoring under-graduate students in rural areas is one tool that the tertiary sector can utilize to promote the advantages of rural practice.

The clinical school was based on a model of preceptorship. In this type of program, the student works on a one-to-one basis with an expert registered nurse who is responsible for the clinical supervision of the student's practicum experience. Thus, the preceptor facilitates the student's learning, identifies the student's problems and ensures that learning objectives are met (Itano et al 1987; Frieses & Conahan 1980; Mooney, Diver & Schnackel 1988). This model is particularly important in the smaller rural hospitals where limited staff numbers have, to date, excluded these hospitals from participating in undergradate and postgraduate training.

Preceptor programs have been used extensively for graduate nurse programs in Australia, Canada and the United States of America. As such, they are not new. Their advantages are well documented and include the development of clinical and professional competence in the delivery of care; enabling the student to learn the administrative and organisational structure of the health service, and familiarising the student with the cultural, economic, political and environmental determinants of the health care service(Maraido 1977).

Preceptors who are highly competent nurses, or expert nurses, act as role models and act as a primary source for the student (McGrath & Kaewing 1978; Frieses & Conahan 1980). They may have specific or general clinical expertise (Mooney et al 1988). Their use in an undergraduate program provides opportunities for students to practice quality nursing care within the realities of the work environment (Itano et al 1987).

The School of Health chose a collaborative preceptor model for the clinical schools. One influencing factor was the rural location of the University. Recognising the importance of vocational education in rural settings, the staff of the School of Health felt that a more productive model for practicum experiences was needed to maximise the student's learning in the practice setting. While the program was established for vocational training, there is no reason why the model cannot be extended for the use of up-grading the skills of registered nurses working in the smaller rural hospitals. Additionally, the program can be utilised for post-graduate placements in the smaller rural hospitals - something not possible at present.

THE CLINICAL SCHOOL

The clinical school in Tamworth commenced in February, 1993. Tamworth is a major rural city in New South wales with a regional population of approximately 50,000. In 1994, the service was expanded to incorporate the North West Health Service, serving a population of 150,000, which has seven hospitals and health services. The service hospitals are located at Tamworth, Gunnedah, Quirindi, Manilla, Werris Creek, Walcha and Barraba. Additionally, the service includes community health facilities. The clinical school is located within the grounds of Tamworth Base Hospital.

The school is staffed by an academic at senior lecturer level and a part time administrative assistant, who are employees of the UNE. All equipment and running costs are met by the UNE. The hospital provides the accommodation and was to appoint a clinical professor of nursing in 1994.

THE PRECEPTOR PROGRAM

After appointment, the Director of the Clinical School, in consultation with the senior nursing staff of the hospital, selected registered nurses who were willing to preceptor the undergraduate students. The preceptors were selected on their commitment to the teaching-learning process and their willingness to participate in a preparatory workshop. The majority of nurses participating in the program were at the level of clinical nurse specialist. In addition to the North West Health Service, other agencies participating in the program are Tamara Private Hospital, Tamworth; McKay Nursing Home, Tamworth; Gunnedah Nursing Home and Gunnedah District Hospital.

All potential preceptors were given reading material and attended a four hour workshop prior to receiving students. The aim of this was to ensure that preceptors had knowledge of the University program and assessment techniques. The preceptors, while receiving no monetary reward for their role, have been assured of priority entry into the University's award programs and have received assistance in research and study skills.

A certificate of preceptorship was presented to all preceptors following successful completion of the workshop and supervision of one student. The preceptors were given evaluation sheets on completion of the workshops. These evaluations were positive. However, most of the preceptors were apprehensive until after the supervision of the students.

Follow-up of preceptors took the form of one two hour workshop at the end of the first clinical placement. Preceptors expressed a high level of satisfaction with their role. In particular, they felt that they had more control over the students' learning than they had with the previous model. They found the students to be motivated and felt that they had learned as 'one needs to understand what one is teaching.'

The follow-up workshops after each practicum were not continued as the costs to the health agency were high and there did not appear to be a need for this formal type of evaluation. However, a two hour yearly workshop for preceptors has been introduced. The aim of the workshop is to present any new material to the preceptors and to cover areas identified by the preceptors as problems.

THE STUDENTS

All three years of existing students were placed with the preceptors; that is, first, second and third year students. As the Bachelor of Nursing is a three and a half year program at UNE, students will be placed in the fourth year of their program from 1995.

Placements commenced with students in the third and final year of the Diploma in Health Sciences (Nursing). Under this award, the students were considered as 'modified external students' and spent nine weeks of first semester on clinical placements. Following this, both second and first year students were placed. All students had 'block' placements of a minimum of three weeks. During this time, they worked with one preceptor and worked the roster of the preceptor - day, evening and night shifts and weekends. The clinical school at Tamworth placed forty percent of the undergraduate pre-registration students with a maximum of fifty students on placement at any one time.

Students were placed in clinical settings which, as much as possible, reflected the tertiary curriculum. However, in some cases, not all students were able to be placed at one time, especially in speciality areas such as paediatrics and midwifery. These students are aware that they will have to 'catch up' these placements in the latter part of their program to be able to register in NSW.

The second and third year students were asked to evaluate the practicum. The tool used was a simple questionnaire which asked for feedback on the students perceptions of the practicum (compared to the old model), the performance of the director of the clinical school and the performance of the preceptor.

Seventy percent of third year and sixty percent of second year students returned the questionnaire. Of these, 85% stated that the practicum was an improvement on the previous model (see Table 1).

Table 1: Student rating of the new model of clinical placement

YEAR	COMMENT								TOTAL
	The same		An improvement		Worse		No answer		
	n	%	n	%	n	%	n	%	n
Third	4	9.76	35	85.30	1	2.44	1	2.44	41
Second	1	5.26	16	84.22	1	5.26	1	5.26	19

Comments supplied on the practicum were positive except for one second student, who had difficulties with her preceptor. Comments included:

There was less pressure to have to complete clinical assessments and less of the 'teacher-student' situation. We were allowed to 'fit-in' to the workplace routine with greater ease.

Preceptors much more easy-going than previous supervisors. They see us work every shift and are not standing there waiting for a mistake. I learned a lot more this way.

Having preceptors is much better than the old clinical system. I have found that I have more responsibility and more support and have been given the opportunity to think for myself and implement appropriate care. I am finally beginning to feel like a real nurse.

The preceptorship has allowed for sharing of knowledge between the students and the registered nurses. It provides the students with the ability to improve in time management skills and organisational skills in all areas.

The latter comment was also shared by the preceptors who feel that having a student 'keeps them on their toes'. Interestingly, the smaller rural hospitals who are joining the preceptor program in 1994, have expressed the view that students are necessary in health settings as they ensure that learning of registered nurses continues and that they are 'kept up to date' with changes.

The negative comment was related to the 'busyness' of the preceptor:

There was no tangible aims to be covered and sometimes it was difficult when preceptors had to run the unit/triage desk etc. However, it was easier being with them than an assessor as they knew how the unit ran better.

This continues to be a problem at times. It is unavoidable because of the preceptors seniority, which means that if the Nursing Unit Manager is away/sick, the preceptor may have to take on this role on this shift. The way we have overcome this, is for the student to work with another member of staff, with the preceptor supervising the experience and ensuring that the learning goals of the student are met. For absences/relocation of preceptors for more than one shift, the student is relocated to another preceptor or to another ward/unit.

Another problem that the student's faced was the pressure of their university work (see Table 2). This was a particular problem for the third years as they were considered to be 'external'. That is, they were only on campus for a period of three weeks in first and second semester. A student commented:

I have found this prac difficult to enjoy with the pressure of assignments... It is hard to compare with last year's, but for me, it was not an improvement - but still a worthwhile experience.

Table 2: Students' comments on time availability for University work

YEAR	COMMENT						TOTAL
	Insufficient		Succificnet		No answer		
	n	%	n	%	n	%	
Third	25	60.97	14	34.15	2	4.88	41
Second	17	89.47	0	00.00	2	10.53	19

With regard to the role of the clinical director, most of the students felt that she was readily accessible and supportive (see Table 3).

Table 3: Students' assessment of the role of the Director, Clinical School

YEAR	COMMENT								TOTAL
	Readily accessible		Not accessible		Supportive		Unsupportive		
	n	%	n	%	n	%	n	%	n
Third	33	62.26	1	1.89	19	35.85	0	0.00	53*
Second	11	57.89	1	10.53	6	31.58	0	0.00	19

* Some students responded more than once

Preceptors

The student also were asked to evaluate the effectiveness of their preceptor (see Table 4).

Table 4: Student's evaluation of their preceptor. Was the preceptor:

	Yes		No	
	n	%	n	%
Aware of the role	23	85.19	4	14.81
Always willing to help	27	100	0	0
Supportive	27	100	0	0

Comment about the preceptors included:

Working with a preceptor gives you a lot more opportunities to learn skills that you have done at Uni as well as learn new skills. It is a great improvement on the system used last year.

A deeper, more meaningful relationship can develop with the preceptor program. This method of assessment enables student [sic] to more realistically take on roles as professional nurses with constant guidance being given.

My preceptor was excellent in her teaching skills. She explained procedures and made sure I knew and understood the procedure I was to carry out. Every opportunity that was available, my preceptor made sure I either participated or was able to observe and answered any questions I had about the event. She also was able to observe and answered any questions I had about the event. She also allowed me to try to time manage my patients and allowed me to take on some responsibility for a group of patients in all areas, but she was sill available for help if I needed it.

CONCLUSION

The Clinical School works on a collaborative model of clinical placement by bringing the University and service sector together. Clinical appointments of academics within the service sector expand opportunities to participate in clinical, research and/or teaching activities and expand networks.

The use of preceptors for undergraduate pre-registration nursing students can increase the likelihood of graduates finding their new jobs rewarding (Douville 1983). This program can be expanded in other ways. The use of preceptors for post-graduate/ clinical based education is a cost effective method for rural areas as quality clinical supervision of nurses be they undergraduates, postgraduates or undertaking continuing education, is fundamental to the consolidation of knowledge and the development of a professional identity (Ford 1980; MacPhail 1975).

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National Rural Health Strategy 1994 The Australian Health Ministers' Conference

Pearson A 1993 A proposal to establish clinical nursing and research and teaching units in the New England Region

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COMMUNITY HEALTH SERVICES DEVELOPMENT PROGRAM

Peter J. House and Amy Hagopian — USA

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INTRODUCTION

This paper will describe the history, experience, and findings of the Community Health Services Development Program.[1] This community service project is a joint venture of the University of Washington School of Medicine (Department of Family Medicine), the WAMI Area (the states of Washington, Alaska, Montana, and Idaho) Health Education Centers (AHECs), the Northwest Area Foundation, and the communities that we serve.

The Community Health Services Development program operates in the broader context of rural health care development in the United States, and this is the best and worst of times for rural health care systems in the United States. On the down side, rural health systems are distressed by financial instability, faltering local economies, provider shortages, and the decline of the local social infrastructure. These issues are well documented in other papers and studies.[2] On the positive side, there is a renewed understanding in the US of the importance of rural health services to the entire country. For example, most health reform initiatives recognize the necessity of assuring the survival of rural health systems. Similarly, the federal government has funded programs aimed directly at supporting rural health systems.[3] Further, reform initiatives are aimed at controlling costs and improving access, and therefore rely on a system that is based on primary care. In that rural health services are cost efficient and rely on primary care, rural health systems are well-positioned for life under reform.[4]

The goals of the CHSD program are to strengthen and expand rural health systems through the provision of technical assistance and the development of partnerships with rural communities. As the sole medical school serving four states, the University of Washington has, as part of its mission, entered into a unique regional partnership with the peoples of Washington, Alaska, Montana, and Idaho. Since the medical school is interested in serving the needs of these states, and since the need in those states is for an increased number of primary and rural physicians, we see it as necessary to serve the rural communities in the region. If the community health systems in the rural parts of the region are failing or in disarray, they will be unattractive to the physicians that we train at the University of Washington to go to practice and live in those same rural communities. In that sense, our service to communities protects our investment in training rural and primary care physicians. CHSD also responds to the national call for service to communities.[5]

In the pages that follow, we will present a somewhat detailed description of the program. First, however, let us frame some of the fundamental tenets of the program.

- *The problems facing rural health systems* (and their solutions) are local. We believe that local communities are in the best position not only to identify problems but also to frame solutions and strategies for attacking those problems.

- *Community is key* America's community structures hold the last best hope for assuring that health care in local areas is appropriate to the community We believe there is great wisdom in local leadership In the project, we search for movers and shakers and local heroes and try to empower them to apply their leadership skills to the problems facing the local health system In the spirit of John McKnight[6], we work to create a health system run by local citizens, not a system which turns people into clients
- *Working with (instead of for) communities* We do not bring preconceived outside solutions to community problems One of the mottoes of the CHSD program is "If you've seen one rural community, you've seen one rural community" We recognize the uniqueness of each rural place and work with communities as they develop their own solutions
- *Flexibility* We believe that any work done by outside agencies with rural communities must bring with it a flexible methodology As will be evident in the paragraphs below, we have a well-thought-out and somewhat traditional methodology around which we improvise to craft programs appropriate to specific communities
- *Use of outside consultants* We believe that outsiders can be useful, and, at times critical to helping rural communities face issues around strengthening their health systems We see it as a sign of success when a rural place develops a long-term relationship with individuals and organizations able to provide assistance We do not distinguish between not-for-profit or proprietary sources of assistance as long as they efficacious and appropriately priced
- *Cost* We believe that health care as practiced in rural America is affordable Our project has developed substantial evidence that, despite small numbers, rural health care systems can be efficient, especially in comparison with extremely costly urban systems[7]
- Quality There is substantial evidence that the quality of care in rural America is high Despite the American tendency to think that bigger is better, we have found in our project and in other studies that rurality per se does not predict problems with quality[8]

History

The Community Health Services Development Program culminates a nearly two-decade-long series of community service projects emanating from the Department of Family Medicine at the University of Washington In the late 1970s, Roger Rosenblatt worked with the people of Nome, Alaska, to help them salvage a hospital construction project 9 Nome's hospital, serving a community of 2,500 with a service area of 6,000, was in need of replacement, so designers drew plans for a new high-tech medical center The costs for constructing such a facility were way beyond the budget, and the community was in grave danger of losing its hospital Dr Rosenblatt helped them undergo a study of the needs of the community He divided needs into those that could be met locally and those that should be met through referral He then assisted Nome to negotiate with the state the approval of an appropriate design

The experience in Nome led Dr Rosenblatt to develop the Rural Hospital Project, a six-site study funded by the Kellogg Foundation in 1984 10 The Rural Hospital Project started with a research emphasis as it attempted to build on the Nome experience by working with communities on assessments of their local health systems As the project developed, the researchers, led by Rosenblatt and Bruce Amundson, added a strategic planning component whereby rural communities could take a measured and rational approach to translating their assessments into strategies for action

On completion of the Rural Hospital Project, Amundson and William Lassey, a rural sociologist at Washington State University, approached the Northwest Area Foundation of St Paul, Minnesota, to expand the community development and strategic planning approach of the Rural Hospital Project to additional communities in the Pacific Northwest The Foundation responded by making a grant sufficient to make available the CHSD approach to every rural place in Washington, Montana, and Idaho (Alaska was not included in the first rounds of the CHSD program because Alaska was not part of the Foundation's territory) The organizational structure relied on the WAMI AHECs to provide staff support in each state

We also helped the AHEC in Alaska secure funding from its state legislature to finance this community-based work in 1990 At the same time, Washington's legislature appropriated funds to develop sites beyond those paid for by the Northwest Area Foundation in Washington State

Figure 1 shows a listing of the communities that we have worked with (including the Rural Hospital Project)

The Project Setting:

Rural Health in the Pacific Northwest of the United States

Washington, Alaska, Montana, and Idaho are essentially rural states The Puget Sound Basin in Washington State constitutes the largest metropolitan area and runs the 100 or so miles from Olympia, Washington (the state's capital), to Everett, Washington, along Interstate 5 About two-thirds of the state's population lives in this area The only other urban areas in the region are Boise, Idaho, Spokane in eastern Washington, and Anchorage in Alaska The largest city in Montana is Billings, with a population of fewer than 100,000 people The terrain runs from the tundra in the north parts of Alaska, to the deserts and dry-land farming of eastern Montana, to the dense temperate rain forests of western Washington and southeast Alaska There are several mountain ranges in the region, and this topography plus the weather create many isolated rural settings

The politics and history of the Northwest are good for a project based on strengthening communities The western United States has a long history of frontier independence and individualism, and most rural places take pride in maintaining as much local independence as possible There are also solid traditions of democratic citizen activism Rural people in the region generally understand democratic institutions and group decision making They appreciate opportunities to express their opinions on local institutions and value and respect people who are willing to put time in on community projects

The rural parts of the Northwest have participated fully in recent government activities concerning health care These would include the Hill-Burton Program of the 1950s and '60s that helped construct rural hospitals, the Medicare and Medicaid programs (federally funded health care financing initiatives), the WAMI program at the University of Washington (the decentralized medical education initiative), and Comprehensive Health Planning Now, health reform initiatives are becoming increasingly important in the development of rural health systems in the region Washington State, for example, recently passed legislation that will ensure universal coverage of all Washington citizens by the end of the decade

Project Organization

The CHSD program organizationally is best viewed as a partnership The central office at the University of Washington in the Department of Family Medicine provides overall project leadership, particularly in the area of methodology The Area Health Education Centers provide leadership and staffing in each of the states served by the medical school Thus, we have partners in Bozeman (Montana), Boise (Idaho), Spokane (Washington), Seattle (Washington), and Fairbanks (Alaska) These resident partners are known to and trusted by the communities in their states The partnership works in a collegial and collaborative manner Money and other resources change hands via a series of contracts and collaborative agreements, and there are few line relationships in the partnership

This team approach has been key to the magnification of our community outreach efforts at the University of Washington and has been a fundamental force behind moving from one project in Nome, Alaska, to over 55 in the region in less than 20 years.

Methods

The Community Health Services Development Program draws on three key bodies of knowledge.

- *Community development.* We work hard at developing community structures and the community capacity to take on issues concerning its health care system. We provide direct educational programs, we sponsor community-wide meetings, and we help train individuals and institutions to take activist roles in the development of the community's health care system.[11]
- *Organizational development.* In our work with community health systems, we seek out and work with organizations with responsibility for the well-being of the local health system. We do financial and organizational reviews of hospitals and other organizations, and, as necessary, help them work on strengthening themselves. We have also helped form local physician recruitment committees and worked with boards on self-evaluations and evaluations of their administrators.
- *Strategic planning.* We help communities to take the assessment information, and, using traditional strategic planning methodologies, to draft plans for action.

In summary, our project goes from assessments of the local health system to a planning project that translates the assessments into action plans. In that the program is based in a durable institutions (a school of medicine and its regional partners), we are also able to provide continuing support to the communities as they implement their plans.

We support our partners in the region by maintaining a large compendium of tools developed out of the three traditions described above. We also serve as the clearinghouse for tools developed by regional partners to be shared with each other.

We prepare careful and thorough documentation of all phases of our work with an individual community. This produces, at times, pounds of paper and background concerning specific communities. This information is essential to developing plans for action, as we believe that planning should be based on information. At the same time, we are careful to understand the appropriate use of information and documentation to a community-based project. It can be daunting and downright discouraging to community groups to be faced with hundreds of pages of documentation as they begin a planning project. In that sense we let the information serve as background material; the plans that we develop with our communities are succinct working documents which rarely run over 5-10 pages.

Project Activities

Figure 2 shows a flow chart for the process. The paragraphs below provide additional descriptions of each of the boxes in Figure 2.

Community selection. All communities with which we work enter a relationship with us voluntarily. We will not work with a community unless we think it needs the kind of assistance we have to provide and will make use of the information we prepare. There are no application forms to become a CHSD community. Some communities hear about our program and decide very quickly to work with us, others take literally years to come to a decision to work with the program.

Planning committee. Early in the project we identify a group in the community that will provide oversight to the project. In many of our communities, the hospital board will serve as the planning committee. In other places (for example those without a hospital), we may form a broader community group. Even in the cases where the hospital board serves as the planning committee, we urge them to involve other key community individuals. An important role for the planning committee is to get assurances (before the assessment phases of the project begin) that someone in the community will act on the information that we gather. Communities can take a step backwards if they allow outsiders to gather lots of information and then refuse, as a community, to take any action on the assessment data.

The next series of boxes in the flow chart describe the various assessments. In that every rural community has problems and struggles with a degree of dysfunction, this phase can often be painful for a community. It simply is not pleasant to have outsiders hunting around and analyzing local institutions. Communities that are insightful enough to anticipate the discomfort of the assessment phase are often those which take the longest time to agree to begin a CHSD project.

Community-wide goal-setting meeting. This is a nominal group decision-making process based on techniques developed in the Community Decision Making Project[illegible]. We try to gather at least 50-100 residents of the local community to come together to prepare a list of things that they would like to see changed about the local health care system. We rely heavily on the community itself to 1) recruit attendance at this meeting, and 2) facilitate the small groups at the meetings.

Needs assessments. Twenty to thirty interviews are conducted with key members of the rural health care system and other local leaders. This assessment attempts to identify key issues facing the rural health system and serves as an excellent way for the outside facilitators to become oriented to the community and its health care system. An alternative to individual interviews is, increasingly, the conduct of a number of focus group meetings.

Community survey. We use a mailed-out survey to people living in the service area gather information about community attitudes concerning the local health care system. In addition, we ask a series of questions concerning utilization of health care in the community and outside the community. The survey has a foundation of about 30 questions that we ask in exactly the same way in each community. This has allowed us to develop a data base and puts us in a position to show each CHSD community how its results compare with the other surveyed communities. The ability to provide comparative data is essential to making this information useful and interesting to the community.[13]

Finance reviews. We typically engage an outside financial consultant to review the finances of the hospital. In some instances, (for example in communities without hospitals) we have done finance reviews of the total health care system. A key to our finance reviews is to put the information in "layman's terms." We avoid the stock financial ratio analysis often prepared by financial consultants in other industries. We try to help rural communities understand whether or not their health care institutions are in financial trouble and what steps they can take to assure continued health or to turn around weak financial situations. The finance review often ends with a long list of recommendations. This part of the assessment can also help to encourage the hospital to attain continuing outside assistance.

Organization reviews. When we look at organizations, we are trying to assess teamwork. We rarely make detailed efficiency studies. More commonly, we will help a hospital assess whether or not the board, medical staff, administration are working well as a team. We ask whether or not each member of the team understands its role and the roles of the other members of the team. We further assess whether or not each member of the team is competently carrying out its responsibilities. In preparing an organization review, we examine as much documentation concerning the organization as possible and then conduct a series of interviews. We will often conduct a session or two with employee groups as well.

Scope of services. This phase of the assessment is the closest link to the previous Rural Hospital Project and the work in Nome, Alaska. A physician member of our team begins by gathering extensive data concerning the scope of medical services in the community and then makes recommendations about expanding or contracting the scope. Is, for example, the scope of services too sophisticated given local community resources, or are there opportunities being missed for expanding the scope of services? We believe a carefully crafted scope of services is essential in building the community's confidence in the local health care providers.

Upon completion of all the assessments, we prepare written summaries of our methods, findings, and recommendations. These all go in 3-ring binders made available to each member of the planning committee. As soon as possible upon completion of the assessments, we sponsor a community meeting where we report our findings. This is done in a two and a half hour meeting, forcing us to summarize information and recommendations. This compression of months of work into a single meeting is a challenge for the CHSD team, but it is a major courtesy to our audience. We found in earlier phases of the project that when we presented each of the assessments in a dedicated meeting, people stopped attending after two or three sessions. By compressing it into one meeting, we can assure a higher community turnout, and we discipline ourselves into crafting a unified picture of the health system with emphasis only the most essential points.

Planning. Upon completion of the assessments, we help the planning committee develop a mission statement, goals, action plans, and task assignments. We have found that just as the compression of assessments can be useful, planning as well can be compressed significantly. In a four to six hour session (spread over two days if necessary), we can work with a planning committee to get a plan on paper. This allows the community to get to work immediately on making things better and prevents burnout associated with extended planning sessions.

Implementation. As necessary and within our resources, we stand ready to help the communities with which we work implement their plans. At minimum, this usually represents one or two follow-up visits to the community to help them flesh out and finalize their strategic plans. Assigning each action step in the plan to an individual , and naming a deadline, helps greatly with implementation. We also find ourselves involved with specific planning, follow-up, and implementation activities. We fully expect to work with the community for at least a year beyond the completion of the draft of a strategic plan.

Schedule and Costs. The entire process described in Figure 2 (the flow chart) takes from six months to a year, with a typical project running nine or ten months to go from the beginning of the project to the development of a draft strategic plan. When we add up all costs associated with this project in the four states, and divide by the number of projects we have done per year, we believe the total cost per project is somewhere from $40,000 to $60,000. We try to get the communities themselves to contribute to that cost up to about a maximum of $15,000 per community.

Combined Communities Meeting. Each year the Community Health Services Development Program invites all its current and "past" communities to attend a Combined Communities Meeting at a place central to the region. While this day is devoted in part to education, its more important purpose is for the communities and rural advocates to share ideas with each other concerning ways to strengthen and expand rural health systems. In recent years the optimistic tone of the meeting has been striking. As recently as two or three years ago, reporting from communities was characterized by tale after tale of difficulties and failures. The 1994 meeting showed that, even for communities with severe and chronic problems, the attitude of the presenters was much more towards what plans for the future were going to be.

Future of CHSD

As CHSD moves into the future, we plan to work harder on issues of public health and health of populations. This change will be accelerated by new incentives likely to be created under health reform in the United States. At the same time, as our communities become more sophisticated, and as health reform moves toward capitation incentives, they are coming to realize that they need to look beyond strengthening health services towards strengthening the health status of communities. This new emphasis will help us draw in the widest possible range of social and health services agencies in communities.

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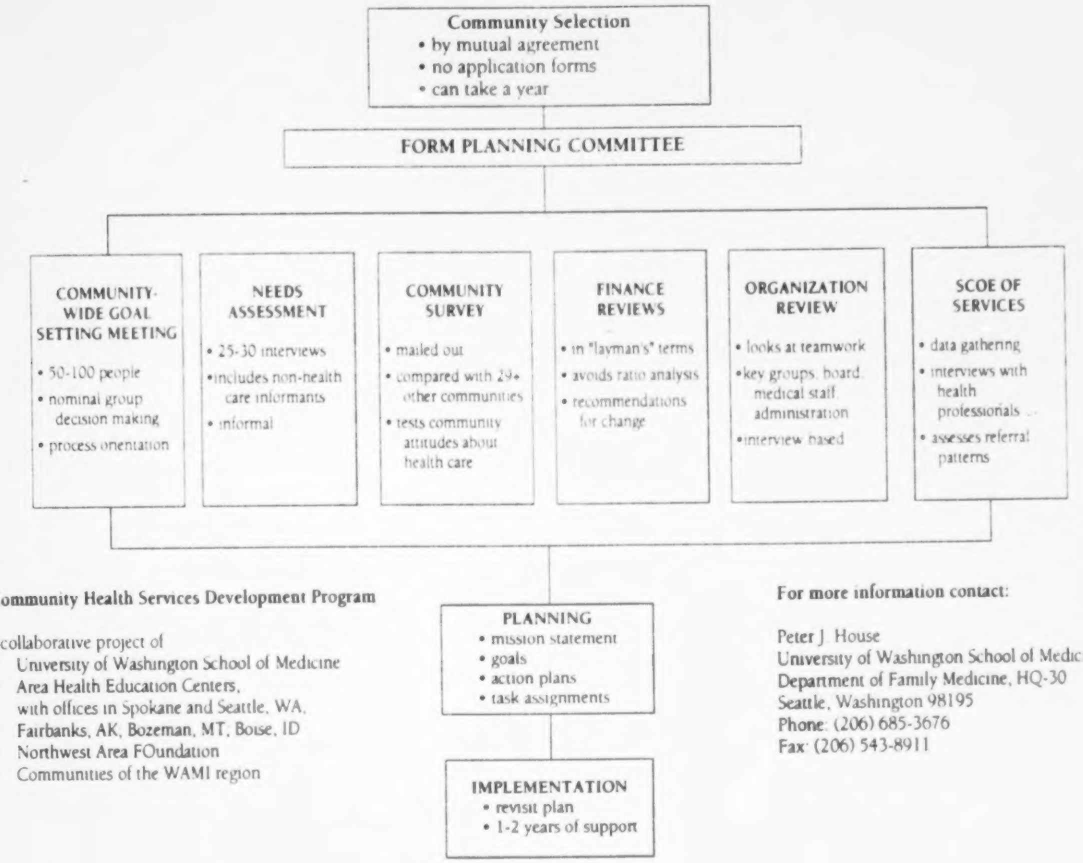
Figure 2 **Community Health Services Development Process**


Community Selection
• by mutual agreement
• no application forms
• can take a year
FORM PLANNING COMMITTEE
COMMUNITY-WIDE GOAL SETTING MEETING
• 50-100 people
• nominal group decision making
• process orientation
NEEDS ASSESSMENT
• 25-30 interviews
• includes non-health care informants
• informal
COMMUNITY SURVEY
• mailed out
• compared with 29+ other communities
• tests community attitudes about health care
FINANCE REVIEWS
• in "layman's" terms
• avoids ratio analysis
• recommendations for change
ORGANIZATION REVIEW
• looks at teamwork
• key groups, board, medical staff, administration
• interview based
SCOE OF SERVICES
• data gathering
• interviews with health professionals ...
• assesses referral patterns
PLANNING
• mission statement
• goals
• action plans
• task assignments
IMPLEMENTATION
• revisit plan
• 1-2 years of support

Community Health Services Development Program

a collaborative project of
- University of Washington School of Medicine
- Area Health Education Centers, with offices in Spokane and Seattle, WA, Fairbanks, AK, Bozeman, MT, Boise, ID
- Northwest Area FOundation
- Communities of the WAMI region

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Figure 1: Matrix of chronological activity in each CHSD community (11/19/93)

TOWN OR COUNTY	ST	gn anti on	FINANCE REVIEW	GOAL SETTING	NEEDS ASSESS	ORG REVIEW	SCOPE OF SERVICES	SURVEYS	STRATEGIC PLANNING
Seward	AK	1	86		86	2/86	X	X	2/88
Kenai	AK	3						10/92	
Petersburg	AK	3	11/91	1/92	10/91	1/92	7/91	1/92	5/92
Valdez	AK	3	10/92	X	X	11/92	10/92	12/92	2/93
Wrangell	AK	3	11/91	1/92	10/91	1/92	1/92	1/92	5/92
St. Maries	ID	1	86		X	4/86	X	9/87	88
Jerome	ID	2	10/90	9/90	7/90	10/90		6/93	X
Montpelier	ID	2	X		X	X		89	5/90
Mountain Home	ID	2	90	X	4/90			3/90	X
Blaine County (S Valley)	ID	3	X	3/91	2/91	4/91		4/91	X
Council	ID	3	6/92	11/92	11/92	11/92	11/92	11/92	2/93
Gem County (Emmett)	ID	3	6/92	11/92	11/92	11/92	11/92	6/92	3/93
Mini-Cassia Area -Rupert	ID	3	5/91	4/91	3/91	6/91	X	6/91	10/91
Oneida County (Malad)	ID	3	2/92	5/92	5/92	5/92	5/92	5/92	12/92
Teton County (Driggs)	ID	3	10/91	11/91	9/91	8/91	7/91	12/91	3/92
American Falls	ID	4	X	X	X	11/93	11/93	X	12/93
Harlowton	MT	1	X		X	X	X	87	87
Culbertson	MT	2			10/89	10/89		3/90	2/92
Deer Lodge	MT	2		X	X			5/89	
Ronan	MT	2						3/90	
Three Forks	MT	2						X	
Big Timber	MT	3	89		5/92	X		4/89	5/92
Choteau	MT	3	X				X		6/93
Cut Bank	MT	3	3/91				X	5/91	
Harlem/Chinook-Blaine C	MT	3						9/92	11/92
Philipsburg	MT	3	90			4/91		5/90	6/91
Plentywood	MT	3	9/91			X		7/91	9/91
Red Lodge	MT	3	X	X			X	X	9/93
Roundup	MT	3						9/92	10/92
Sheridan	MT	3						12/92	9/91
Ellensburg	WA	1	86			86	X	X	87
Forks	WA	1	85		X	4/86	X	X	87
Tonasket	WA	1	8/5/86		X	86	X	X	87
Grand Coulee	WA	2	88		88	3/90	X	89	9/93
Newport	WA	2	89		5/88	89	5/4/89	5/89	9/89
Othello	WA	2	89		9/88	89	5/89	5/89	11/89
Ritzville	WA	2	X		X	1/89		89	4/90
Toppenish	WA	2	X		X	X		5/89	90
White Salmon	WA	2	X		X	12/88		6/89	11/92
Cle Elum	WA	3	4/92		X			6/93	
E Grays Hrbr-McCleary	WA	3	10/90		1/91	3/91	X	4/91	6/91
East Lewis Cnty-Morton	WA	3	12/91	3/92	3/92	3/92	3/92	3/92	7/92
Ephrata	WA	3							6/93
Island County	WA	3						3/93	93
Klickitat County	WA	3			3/92		X	6/92	
Mason County	WA	3		2/90	5/92	12/91	2/92	5/92	7/92
N. Pend Oreille County	WA	3	2/91	1/91	X			2/91	4/91
Orcas Island	WA	3		5/92	10/92	8/92	1/93	9/92	12/92
Pullman	WA	3					X	2/91	
Republic	WA	3	9/90	6/90	5/90	11/90	X	1/91	7/91
Snoqualmie	WA	3						9/92	92
South Beach	WA	3		5/91	1/91		X	7/91	7/91
W. Whitman County	WA	3	12/90	3/91	7/90	12/90	X	1/91	7/91
Colville	WA	4		6/93					
Odessa	WA	4			6/93				9/20/93

LEGEND

X	was completed, date not on document
blank	either still in process or it does not pertain to the particular community
generation	1= RHP/Kellogg (1985-88); 2= NW Area #1/AHEC (1988-1990); 3= NW Area #2/AHEC (1990-93); 4=WAMI states and AHEC (1993-)

SURVEYS ONLY (Idaho) Arco, Gooding, Idaho Cnty (Grangeville), Lemhi/Custer Cnties (Salmon), Silver Valley, Soda Springs

REDRESSING URBAN BIAS: A NEEDS-BASED APPROACH TO HEALTH CARE RESOURCE ALLOCATION IN REMOTE AUSTRALIA.

Robyn McDermott — Australia

ABSTRACT

Outback Australia still exists as a frontier economy, relying on public sector provision of the vast majority of services, including health care. In the Northern Territory (NT), high mortality ratios and hospitalisation rates reflect the poor health status of Aborigines who, in 1990/91 accounted for 25% of the population but 40% of hospital patients and 53% of hospital bed days. Funding for primary health care (PHC) continues to be based on historical utilisation rates which perpetuate existing bias towards the urban hospital sector. Health care expenditure analysis suggests that current expenditure patterns fail to fulfil national goals of equity of access and allocation efficiency (maximization of health outcomes) for the NT Aboriginal population.

This paper outlines a population needs-based resource allocation formula for remote communities which takes account of the three dimensions of need, cost of remoteness and demographic structure. National per capita health care utilisation data are used as a baseline and an allocation weighting is proposed based on the above three measures. This formula is then applied to a typical remote central Australian community. The cost-benefit implications of this alternative funding strategy are explored.

Keywords: *Resource allocation, needs-based, Aborigines, rural health, Primary Health Care, equity of access.*

INTRODUCTION.

Remote Australia occupies most of the interior and north of the continent, with fewer than 0.057 dwellings per square kilometre (1) and less than 1% of the total population, most of which occupies the coastal fringe. It exists largely as a "frontier" economy, relying on public sector provision of the majority of services, including health care. Some of the differences between remote and suburban Australia in the provision of primary health care services are outlined in Table 1. These differences relate to the client population which in remote Australia is largely Aboriginal, with high morbidity and mortality, poor access to basic services of all types, high unemployment rates and a small political voice. The funding and provision of services also differs, in that, while Medicare provides an uncapped, demand-driven "private" service with high levels of consumer choice to the suburban majority, remote Australians receive a capped, public sector-supplied service, frequently subject to budgetary cuts and staff shortages. In addition, these services are often culturally inappropriate, and this, combined with poor resourcing and high staff turnover, leads to low demand despite high levels of morbidity in the Aboriginal client group. Emergency medical evacuation services for the very ill are, however, highly developed, so that low utilisation of primary care services is translated into high hospitalisation rates.

How resources are allocated for Health Care.

Table 2 outlines some of the mechanisms by which resources are allocated for health care in most countries. In the public sector, the most powerful of these is inertia, where budget estimates are based on last year's expenditure. Past investments, for example a large hospital or diagnostic centre, can distort spending decisions as well as donor (Canberra) driven agendas which may be inappropriate. One example of this was the decision to cease active tuberculosis casefinding throughout Australia in the 1970's, despite the documented high rates in Aboriginal Australians. Many vertical programs emanating from Canberra continue to be inappropriate for and inaccessible to rural and remote communities (2). A significant driver of health care resourcing decisions is political voice, which favours articulate and powerful urban elites. As ex-Senator Richardson recently observed, "Ignoring Aboriginal Health incurs no electoral penalty". A variant of this is the recent fashion of submission-based health program funding which is also regressive in that it rewards those who can master the art of grant writing.

Health economists have entered the fray by refining methods by which resource allocation decisions can be influenced by considerations of efficiency and equity. Most policy statements (including the Commonwealth-States Medicare Agreements) embody notions of equity, usually equity of access to health care services. However, expenditure analysis can reveal patterns which are neither allocation-efficient nor access-equitable.

Health care expenditure in the Northern Territory.

The Northern Territory is large (1.2 million square km) and sparsely populated (pop. 167,000) with a narrow economic base, principally mining, service industries and tourism. There are about 46,000 Aborigines, more than half of whom live in remote communities. High mortality ratios and hospitalisation rates in the NT reflect the poor health status of Aborigines who, in 1990/91 accounted for 25% of the population but 40% of hospital patients and 53% of hospital bed days (3). Health services to remote areas, compared to the rest of Australia, are characterised by higher costs of service delivery, substitution of general practitioner services by other health workers or telephone consultations, and substitution of specialist services by GP services. The population:GP ratio tends to be higher in the NT (4).

Funding for health services in the NT relies on a complex combination of direct Commonwealth government expenditure, NT government expenditure and Commonwealth grants. The purpose of the Commonwealth grants is to ensure equity across Australia in service provision, where states have varying resource bases, varying costs of providing similar services and varying needs for services based on demography. However, while the Commonwealth Grants Commission recognises that some states may need more resources for remote communities, it also accepts that services for remote populations cannot be provided at the same level as those for urban populations (5). Yet, it has never been agreed exactly what level of service is appropriate or necessary for remote communities.

Overall per capita government expenditures for health care in the NT for 1990/91 were 125% of Australian expenditures, despite mortality and morbidity profiles which were 4 – 1500 times the national average (6). Within the NT, allocation between health care functions is weighted towards hospitals (57% of expenditure compared to 52% for the rest of Australia), with rural health services receiving 13% excluding patient travel (7). Allocation decisions between programs are predicated on historical utilisation rates which tend to favour the hospital and urban sectors and perpetuate existing inequities, ignoring the reservoir of unmet health needs in remote communities which have not been translated into effective demand, except for hospitalisation. Despite this, hospital separation rates for Aborigines in the NT were 2.2 times that of non-Aborigines (8) which seems low in the context of disease-specific mortality ratios ranging from 4 to 1500, and an all-causes Standardised Mortality Ratio of 3.8 (9). That year, Commonwealth Grants Commission estimates (based on hospital utilisation data from the early 1980's) assessed Aboriginal requirements for non-hospital health services at 2.7 times the rate for other Australians (10). The same year, per capita expenditure for rural primary health care in the NT was $503 compared to the national average of $606 (11). These data are summarised in Table 3.

There is some evidence in central Australia that strengthening primary health care services to remote Aboriginal communities can lower hospitalisation rates. An example is the community controlled Nganampa Health Service (covering the Pitjantjatjara Lands south of Alice Springs, population 2,184, and funded by the SA Health Commission and ATSIC) which had a per capita expenditure of $989 for primary health care in 1990/91, and was able to achieve a 58% reduction in medical evacuations in 10 years of operation (12). This compares to $503 per capita for the same period spent by the NT Department of Health on rural primary health care. Hospitalisation rates in the NT population have not declined.

The inequity and allocative inefficiency described here is unlikely to be correctable by merely re-allocating at the margin within the existing budget. This would generate further inequities between the NT and other states. Rather, this is an example of what Light refers to as the "peculiar inefficiency of underfunding" (13). The majority of the most cost-effective interventions occur in the non-hospital sector, where relatively small expenditures generate large benefits (14). Clearly, remote area primary health care services need more resources and these must be spent effectively. Questions of technical efficiency and cultural appropriateness are beyond the scope of this paper, but some of the conditions (in addition to adequate resourcing) for effective primary health care are summarised in Table 4. The questions we will seek to answer here are (not necessarily in order):

(A) What resources are required to redress current inequity of access to health care in remote communities, and

(B) how can this be calculated?

The recent National Health Strategy proposals to improve Australia's Rural Health Care Services suggested several options for formula funding to address remoteness issues, but took little account of known regional morbidity and mortality differentials (15). The National Better Health Program's final report on the role of primary health care (PHC) in improving Australia's health (16) noted persisting inequities in relation to the accessibility of PHC for Aborigines and remote Australians but proferred no direction in addressing them.

Increasing equity of access; a needs-based methodology for PHC resource allocation.

A needs-based resource allocation formula for remote Aboriginal communities will be

- free of supply influences
- free of demand (historical utilisation) influences
- based on
  - (i) morbidity or mortality as a proxy for "need"
  - (ii) the real cost of remoteness (time/distance units)
  - (iii) demographic structure.

The problem of Need.

Economists have generally dealt poorly with the notion of need (except as expressed by demand), apart from noting that there is considerable demand for the concept among health professionals (17). The latter group has created a multiplicity of measures of need, ranging from medically-generated to patient-generated proxies (18) and the risk approach advocated by WHO (19). Most of the work done on needs-based planning comes from the UK Resource Allocation Working Party (RAWP) which recommended weighting populations by an indicator of morbidity or need for health care which was free of supply influences (20). After considering various alternatives, the standardized mortality ratio (SMR) was chosen as the most appropriate proxy for need for the purpose of a resource allocation formula, although there were many critics (21). There is good evidence that SMR's, while not reflecting self-reported acute episodes of illness, correlate well with self-reports of chronic and disabling illness (22) and therefore those types of illness that are associated with considerable and continuous needs for health care.

Other studies in developing countries, where inequalities in health status are wider than in the UK, and where particular groups suffer extreme poverty and ill-health, have found self-reported illness to be a poor predictor of mortality (23). Sen (24) has argued eloquently why this may be so. It is likely that Aboriginal people, at least in remote Australia, fit into this latter category, where poor health is so extreme and premature death so ubiquitous that it is taken to be the inescapable norm, and does therefore not warrant comment as a utility dysfunction.

For the purposes of our formula, the NT all-causes SMR for Aborigines is 3.8 (25). It can be argued that, while Aboriginal people may die prematurely at 3.8 times the rate of other Australians, extremely high morbidity rates reflect a level of disability and suffering not contained in the SMR. On the other hand, much of this morbidity is either determined by factors outside the immediate health care service sector (poor housing, sanitation, diet) or is not very effectively dealt with by health care services after the event, eg diabetes. In other words, if there is not a clear capacity to benefit from a health service, such an indicator cannot be conceived of strictly as a "need" (26). One would have to be selective in the use of morbidity data for this purpose, and choose conditions which were known to be affected by improved primary health care.

Therefore, while the use of the SMR as a proxy for need is imperfect, it has the advantage of being a single number, easily measured and can be used for inter-population comparisons. The next question is, how should the SMR be used? For our purposes it will be used unmodified as a multiplier; a direct proxy for the level of (currently unmet) need for health services.

The problem of costing "remoteness".

There are several dimensions to the remoteness factor. The first is simply that of the cost of goods and services: Everything costs more in the bush, mainly reflecting the high cost of road transport. The Australian Bureau of Statistics has been able to quantify this in surveys of standard food basket prices in different communities compared to prices in capital cities. The cost multiplier thus calculated varied in one year from 1.27 for Yuendumu (NW of Alice Springs) to 1.36 at Kintore (on the WA border) (27). These costings may be distorted by simple unavailability of standard items or by community store policies which artificially raise prices still higher. Most of these unmeasurables increase the real cost of remoteness for people in these communities (28). For the community we are considering here, the "distance-cost" (standard food-basket price index) multiplier is 1.27.

The second dimension in costing remoteness is staff time taken up with non-clinical activities which are peculiar to remote area practice. These are of two kinds; (i) travelling time to communities (for town-based providers) and outstations (for community-based providers) and (ii) time taken for non-clinical essential administrative tasks, eg ordering and checking pharmacy and equipment, making patients' appointments and arranging travel, dealing with environmental health hazards in the community and essential R&M on clinic buildings and vehicles, public health promotion and training of health workers etc. These are some of the health-related but not direct service-provision activities which occupy health providers in the bush which form no part of the normal work activities of suburban health care providers.

For one community in central Australia, it has been estimated that travel time is 25 - 30% of working time, and non-clinical duties take another 20 - 25%, conservatively. For communities with many outstations this proportion would be increased. Therefore, a nurse has about 50% of total time for clinical work; one full-time equivalent job would require nearly two staff. A conservative multiplier for the staff "time-cost" of remoteness, therefore, would be about 1.7 in this case.

Using this method, the cost of remoteness for this community is 1.27*1.7 = 2.16 times the Australian average.

Demographic adjustment.

Due to high levels of premature mortality and high fertility, the demographic profile for NT Aborigines is younger than the rest of the country, with fewer old people requiring institutional support (29). The Commonwealth Grants Commission adjusts for this different age structure and for 1990/91 estimated the NT's needs at 89% of the Australian standard. For this exercise, a multiplier of 0.89 will be used as a "demographic correction".

The Sum.

Combining the 3 dimensions and the multipliers attached to them produces a factor of 7.3 for this particular community. This is the amount for 1990/91 by which the average Australian per capita primary health care expenditure ($606) would be multiplied, to arrive at a level of resources necessary to achieve equity of access for remote Aboriginal Australians based on need and the real cost of services. This figure is $4,424. This is nine times higher than the amount actually spent in that year in the NT.

It is already clear from the example of the Nganampa Health Service, that even an amount far short of that ($989) produces clear benefits, in this case a marginal increase in investment in community based primary health care can achieve a large reduction in hospital referrals. This effect is clearly contingent on factors other than increased resourcing, but cannot occur in its absence. Although cost savings in hospitalisation, premature death and disability are not estimated here, this case demonstrates that better resourcing of PHC services in remote communities can improve both allocative efficiency and equity of access to health care.

The inefficiency of under-resourcing PHC for the poor has also been demonstrated in the United States where the uninsured poor consume greater hospital resources than the insured middle class and also experience worse health outcomes (30). Much is made in the Health Economics literature of the conflict between equity and efficiency considerations in resource allocation. While the marginal cost of providing services of all kinds in remote areas is admittedly high, it can be argued that these costs are already being transferred to the hospital sector, where health outcomes are poor and patient-costs are high. The cost to patients and their families of a continuous cycle of evacuations to Alice Springs has not been measured, but includes family disruption, poor emotional and intellectual development in children, exposure to alcohol, violence and STD's in town, a high incidence of self-discharge, and alienation and fear (31).

Implementation.

Adequate resourcing for PHC is a necessary but not sufficient condition for equity of access criteria to be met in remote Aboriginal communities. The other conditions are mentioned in the National Aboriginal Health Strategy and include meaningful community control, proper cross-cultural and clinical training for staff, properly functioning "health hardware" and better opportunities for education, employment and income generation in the communities.

Although there has been no agreement between governments as to the necessary or appropriate level of health services in remote communities, standards have been developed for remote area PHC by Aboriginal people, researchers and the Australian Community Health Association (32). These standards deserve to be implemented.

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TABLE 1.

SOME DIFFERENCES BETWEEN SUBURBAN AND REMOTE AUSTRALIA IN THE PROVISION OF PRIMARY HEALTH CARE SERVICES.

SUBURBIA	REMOTE COMMUNITIES
Majority of population	Less than 1% of population
High demand, low morbidity	Low demand, high morbidity
Demand-driven (uncapped)	Supply driven (capped)
Largely Medicare-funded	Mostly State/Territory government funded
Middle and high socioeconomic status	Low socioeconomic status
GP services oversupplied	GP substitution by other carers
Few cultural barriers to PHC	Often cultural incompatibility between providers and consumers
Easy accessibility, wide choice of PHC	Poor accessibility, few choices
Favourable proximal determinants of health	Unfavourable determinants ie. poor water supply, sanitation, housing, food supply, low income and education levels.
Strong political voice	Low political profile (few votes)

TABLE 2.

HOW RESOURCES ARE ALLOCATED FOR HEALTH.

1. Inertia (historical utilisation)
2. Past Investments eg large hospitals or expensive diagnostic centres
3. Donor driven agendas (Canberra-determined priorities)
4. Political voice
5. Health benefit maximization. Move at the margin to increase allocative efficiency
6. Equity, usually equity of access. In the long run, to increase equity of health.

TABLE 3.

SOME HEALTH INDICATORS AND EXPENDITURE DATA FOR THE NT, 1990/91.

Disease-specific mortality ratios for Aborigines	4 - 1500**
All-causes Standardised Mortality Ratio (SMR) for Aborigines	3.8 **
Hospital separation ratio (Aborigines)	2.2 **
NT Aboriginal population (% of NT)	25% *
NT Aboriginal hospital patients (% of NT)	40% *
NT Aboriginal hospital bed-days (% of NT)	53% *
CGC Estimated need for non-hospital Aboriginal health care	270% *
Overall per capita Govt. Health Care spending in the NT	125% *
Average per capita PHC expenditure (Rural, NT)	$503 *
Average per capita PHC expenditure (Australia)	$606 **

* *Pearse, L & Plant, A.J. Health Services for remote areas of northern Australia. Needs and resources. 1993, Aust J Pub Admin. In press.*

** *Australian Institute of Health and Welfare, 1992. Australia's Health. AGPS, Canberra.*

TABLE 4.

A NEEDS-BASED RESOURCE ALLOCATION FORMULA FOR PHC IN REMOTE ABORIGINAL COMMUNITIES (R).

- Free of supply influences
- Free of demand (historical utilisation) influences

• based on	(i)	mortality as a proxy for need	SMR
	(ii)	the real cost of remoteness (distance/time units)	DT
	(iii)	demographic structure (adjustment fraction)	DEM
	ie.,	R = SMR x DT x DEM.	

HOW TO CATCH AND KEEP A RURAL DOCTOR

Digby Hoyal — Australia

1. THE PROBLEM

A torrent of discussion has taken place in the last five years on the problem of providing medical services to the rural communities of Queensland.

It appears that the difficulties are no new thing. A plea from Dr M Patkin[1] appeared in 1968 entitled "The rural doctor problem."

A flurry of activity took place in the late seventies culminating in the Conference, "Country Towns, Country Doctors" in1979[2] perhaps following a paper in 1978 by Colditz GA and Elliott CJP on Queensland's Rural Practitioners.[3]

At that time there was a general shortage of doctors in Australia although it was most noticeable in the provincial cities and country areas.

In spite of major increases in doctors numbers and proportions since then the doctors seem to have joined the rest of the population in migrating to the cities.

The problem has thus become acute. In spite of this it remains largely unquantified and the indices that have been applied remain relatively blunt statistical weapons. Figures vary greatly but the following are probably among the more representative.

Queensland, as the fastest growing state, probably has the lowest ratio of total doctors to population of any Australian state,[4] certainly below the index figure of 200.

The Commonwealth Department of Health, Statistical services section distributed 1989 census figures by the Remote and Rural Areas Classification (RARA) to arrive at ratios of one GP doctor to 641 patients in the metropolitan area, but 1078 in Rural major, 1458 in Rural Other, 1408 in Remote Major and 1229 in Remote other.[5]

A slightly lower number of services is recorded annually by Medicare for rural as opposed to city GPs and this is consistent with US figures of 4.5 physician contacts for rural and 5.3 for urban patients annually[6] but this must be heavily outweighed by range and complexity of services including inpatient services provided by rural GPs.

RDAQ has on its Database 401 rural doctors which includes all those it can identify in public and private practice. With a rural (RARA 3-6) population of a shade below 1M the practical ratio of rural patients to doctors approaches 2400 once the provincial cities and satellite areas are excluded.

There may be as many as twice as many patients per rural doctor compared with the city. This represents a considerable gap in equity and access for the rural sector whose labour supplies all the wealth of this State, through Coal, Wheat, Cattle, Cotton, Bauxite, Silver- lead, Wool and all the other primary products that make Queensland the best heeled state in Australia. Certainly the contribution of the BMW drivers in Brisbane is not huge!

To reach parity a further 112 GPs or so would be required now and the situation is deteriorating in spite of recent conscious efforts to address it.

2. RECRUITMENT TRAINING AND RETENTION

The fundamental truth was iterated by Max Kamien in the West Australian report of 1987 "Rural practice is ultimately a matter of establishing doctors' families in the country, since rural practice is a family concern"[8]

Trans 1 "Recruitment, Training and Retention

Suggested areas for study are legion but the total volume of published studies is piteously small. Much more is apparently in progress and yet more requires to be initiated. Here are a few strategies in current view in the Queensland situation.

Trans 2 Training,

Training and educational considerations have been well addressed and processes are operative to meet the needs of the future through the FRM, The RACGP Training Programme, and the four Rural Health Training Units, together with the fortification of the University of Queensland General Practice and Rural Medicine components. I have left this subject to the experts.

Trans 3 Recruitment

Recruitment is also being addressed, though with less enthusiasm since it is outside the usual practice of educational institutions to apply affirmative techniques and due also to some suspicion of the figures. Certainly the rural origin theory of Rabinowitz[9] seems well supported by Practice Intentions expressed in the South Australian Study of 1992[10]

Also 1993 "Workforce Characteristics of Medical Practitioners in Queensland 1991[illegible] seems to refute Biggs[illegible] and supports the need to ensure that pupils from country schools have equitable access to Medical School places.

The Rural Doctors Association of Queensland supports programmes aimed at proselytizing rural pupils as well as those offering support to Medical Students through Rural Clubs, Mentors, Pastoral workers and assistance with matched clinical attachments at all levels in rural practices.

Due to the impressive commitment of individuals, institutions and governments, many programmes are addressing Recruitment and Training. The Transfusion is starting to flow.

3 RETENTION

Unfortunately the Haemorrhage has not yet been stemmed. The saddest feature of rural medicine is the continuous loss of doctors from the Bush.

Various studies have pointed out the positive features of rural lifestyle and interesting rewarding work. It has been assumed, reasonably that most rural doctors would stay in the country unless the summation of negative features caused them to leave.

If the literature on recruitment and training is inadequate, that dealing with the retention of rural doctors is piteous. Yet the whole effectiveness of Recruitment and Training is entirely dependent on maintaining Rural GPs in situ for at least the present modal duration.

Also small increases in retention make huge improvements to workforce statistics.

Wise et al 1992[13], note that 32% of doctors surveyed expected to leave within 3 years, 44% in six years and 77%indicated they would choose a non-rural position if they moved.

Quantitative statistics based on whole populations are useful , but, if we are to find ways to increase retention rates, we must use qualitative methods that identify the problems in each case, and help to point to solutions. Each doctor leaves for reasons that compel him to make a major move of household and work probably to a slightly less well remunerated situation. We need to seek the proximate causes of such serious decisions in each case.

The Medicare statistics approach taken by Adhikari, Calcino and Dickinson[illegible] offers a method of looking overall at the workforce situation but they themselves point out the weakness of using broad figures and the need to follow cohorts of entrants into rural practice as used by Pathman[illegible].

Let us examine what we presently believe are the influences.

First the *professional factors affecting the Doctor, second the social and other factors affecting the medical family and third the community influences and predilections that may be operative.*

Trans 4 Retention. Professional

A. THE DOCTOR- PROFESSIONAL FACTORS

i. THE INTEREST

The appeal of rural practice in its technical breadth and the close personal relationship between the doctor the patient and the ancillary staff.. This is highly dependent upon a well equipped local hospital and strong loyalty and support of the doctor by the hospital and community health staff. John Humphreys[16] has demonstrated the pivotal importance to rural patients of the local doctor and the local hospital. This may not be gratifying to other professionals and services but its significance must be accepted. Modern pushes by sundry groups to talk up their importance in the health field is understandable. However it is the patient's perception that must receive most respect. It is important that those who supervise rural hospitals ensure that the whole district supports the hospital and the hospital stands firmly behind its doctor or doctors. It is those doctors who work exceptional hours and accept enormous emotional and professional loadings. For most of Queensland it is unnecessary to stress this point but as one who left a country town due to jealousy and disloyalty by competitive staff, I feel that it must be pointed out that a few towns who continuously lose better than adequate doctors cognizance must be taken of the need for that loyalty and support, and Health Authorities must back their MSRPPS and Superintendents.

Likewise the interest of the work depends on the ability of the doctor to exercise the skills which have been laboriously acquired so as to benefit rural patients. The role delineation of the country hospital must be seen as a planning tool aimed at increasing the range and quality of procedural services, and not as a weapon to achieve scale savings based on marginal costings of procedures.

It has been well shown that in Obstetrics[illegible] and Anaesthetics,[illegible], two of the most demanding procedural areas, that the services of rural GPs carry no higher morbidity than those in tertiary referral centres. Certainly the patient demand for such services seems strong though we have yet no researched evidence to support that.

Administrators must consider not the marginal costs of procedures but the total community cost. This includes the cost of maintaining a hospital presence at all in a rural centre together with the transport and follow up costs to health services and patients as well as the loss of productive work time and cost of child care etc. by the patient and family. Early figures from the Flying Obstetrical and Gynaecology servrces indicate that the costs of obgyn procedures carried out at rural hospitals by the team are considerably less than those pertaining to regional hospitals [illegible]

Flexibility is also vital. Rigid adherence to state and federal funded programmes is inappropriate in the small rural centre where respite, nursing home and acute beds are needed in variable mixes varying with time. The move to enable "Cashing out of hospitals or districts is recommended in NHS Strategy Background Paper 11[20] and it is hoped that multi-functional centres will be managed flexibly and quite soon.

The principal that it is necessary to perform planned procedures(eg. Caesarean section) in the clear light of day with all staff and systems in order to be ready for emergencies must be appreciated. Some "button counters" seem to miss the need for practice in order to ensure staff and equipment remain honed.

Unsavoury competition between "Public" and "Private" considerations presses heavily on many rural doctors. *The difference is artificial and never benefits the patient.* RDAQ is pressing for access to public patients by all accredited rural doctors on a Fee For Service basis to ensure that the skills of many are not lost to public patients since with low participation in Hospital insurance Schemes most procedures in the bush tend to be Public. Often a procedure has to be carried out by a less well trained public doctor as the most qualified is "Private". Further activity is needed to address this which also bears on the willingness of Private GPs to offer relief to the local hospital doctor.

The medico-legal position of proceduralists invites consideration. The Western Australian experience of GPs ceasing Obstetrics is becoming mirrored in Queensland. Some doctors have announced retirement from obstetrics and rural trainees are wondering whether it will be economic for them to accept small obstetric loads for financial and litigous reasons. The Federal Health Department cannot afford to wait for the Tito Committee. Action is needed now .

Queensland Health has recently embarked on a programme to encourage specialists to set up in rural centres as needed. Such specialist support is excellent and will relieve GPs of some strain. However placements must be handled sensitively to avoid competition for procedures that the GPs customarily perform in rural locations.

Retention clearly depends on maintaining professional interest. How can we do it better?

ii. THE WORKLOAD

None of you would get into a plane that was about to be piloted by someone who had flown continuously for twenty four hours a day for the previous twelve weeks. It is surprising that patients entrust their appendix or delivery to a doctor who works such hours. The 1992 South Australian Study records Pressure of work as the second highest factor likely to influence rural GPs to leave.[10]

The right to relief established by Medical Superintendents with Right of Private Practice (MSRPPs) in 1988 has improved the situation but the foremost request by GPs for services from RDAQ and Divisions is for Locums.

The RIP scheme will help but a very flexible and opportunist policy is required to pick up on all opportunities to relieve the excessive on-call time and recall load of rural doctors. The Divisions are working on this and expect to spend $480,000 this year on a range of schemes to employ locums in Queensland.

Quantitative study of the workloads of Rural GPs is lacking. Work in progress by Sondergeld S. on the work load of and use of time by Medical Superintendents with Rights of Private Practice in Queensland should assist in preparing cases for industrial review of workloads.[21]

More research is needed on the work of the Private GPs and possibilities of better sharing of on-call and recall duties.

A concept that calls for consideration is that espoused by the Ontario Medical Association-1993 Interim Agreement on Economic Arrangements,[22] which agrees that "The Government will attempt to provide for contracts such that where possible at least two physicians are available for any one designated community and adjacent areas or communities". Research is needed into the acceptability of such a scheme to rural communities that have traditionally demanded their own doctor and into the industrial ramifications to Government.

Adequate support staff are essential to mitigate the effects of long hours of work. Walton et al 1990 in New Zealand[23] reported that rural GPs consistently had fewer staff than urban practices. It would be interesting to know if the same applied in Queensland.

B. THE DOCTOR'S FAMILY.

[Trans 5 The Family and community]

i. SPOUSE"S EMPLOYMENT

To return to Max Kamien's "bon mot"[8], the presence of a rural doctor implies settlement by the doctor's familiy. The employment of the partners.(Spouses, Wives etc.) is critical.

The qualitative studies of the PGMEC group[24] demonstrates much frustration by spouses at inability to obtain work for which they are trained and reveals antagagonism by rural communities to doctors wives taking paid work, especially in hospitals. Given the bias of medical students for teaming up with "other doctors, nurses and barmaids as these are the only women they ever meet" this is a source of family stress that calls for both research and positive action.

Health authorities could create job sharing or part time positions to keep doctors spouses active in their professions. This could benefit the communities and hopefully assist in retention.

Contented spouses rightly respected as vital components for retention. The enormous influence of spouses on the career paths of medical husbands has been demonstrated by Skipper and Edwards.[25] Some additional perceptions of the pivotal role of doctor's wives in local communities come from Lorch and Crawford, 1983[26] who noted the high community expectations placed on them and the great disadvantages due to their spouses long hours of work. These factors were regarded as negativing the social status conferred by being a doctor's spouse.

More work is needed here.

ii. EDUCATION

The desire of doctors to ensure that their children receive education consistent with hopes of professional careers is at odds with the lower expectations of many country secondary schools in spite of very considerable work by rural school staff to raise academic standards. Certainly Queensland Health figures for medical school entry confirm the bias against non-Metropolitan and State school pupils for places.[11]

The South Australian Study[10] indicates that Children's Education is the most potent reason for rural GPs intention of leaving the country.

Most mining companies provide for boarding education costs for key employees. Governments are reticent to open a new field for claims by sundry professionals working in the bush. Nevertheless it almost certainly would be less expensive for them to provide such benefits than to continue to train and place new employees. Investigation of this aspect may assist the position although there will always be GP's families unwilling to surrender their children to distant boarding schools. Trends for new private schools in district centres may relieve the situation. Some research is called for into this potent predictor against retention.

Some doctor's children find themselves discriminated against in rural schools mainly because they are seen as "rich kids". This may add to weight to decisions to board.

iii. MONEY AND JEALOUSY

Many rural dwellers may have property and indeed incomes much greater than those of the local doctor. Most of these tend to live outside the townships on properties and mines etc. In a town only the shire clerk, engineer and a few traders are likely to have a level of discretionary spending power that approaches that of the doctor. Certainly the Nursing and managerial staff of local hospitals can not compete. The mature attitude to this was well expressed recently by Johnson J. Queensland Country Life[27] "Nobody minds them earning more than a fair day's pay, because they undoubtedly put in more than a fair day's work and are an important part of our community services".

Nevertheless all are not mature, and a fair amount of petty jealousy is sometimes detectable especially in communities where things are going badly , as in drought, when the doctor's income seems quarantined from the disaster affecting most others. Much tact and goodwill may be needed and it all adds to the strain on the medical family.

iv. HOUSING

Housing standards for doctors and for their locums have not received much thought. Poor housing contributes to the lack of privacy complained of frequently by spouses.[24]

Government servants in the bush have entitlements to certain standards, but GPs are not government servants. Much rural housing is poor and expensive. a few doctors have invested unrecoverable sums in order to make their lives comfortable. Most are not prepared for such financial sacrifice since such houses rarely sell for the cost of construction and the market is slow.

Local and health authorities could set standards for construction and such facilities as air-conditioning in order to encourage doctors to settle. Service clubs could take an interest. Interest free loans, guaranteed repurchase or the application of RIP funds to embellish housing could be effective. The same considerations might apply to other key workers like magistrates and school principals. Some investigation is called for.

v. TIME WITH THE FAMILY

Proper time off-call is the other main stress complained of by spouses in expressions like ""There is little time for family interaction with the father. He is shared with the community." and "Possibly my one regret is that the children may remember their father as careworn, a little grumpy and always "at work""[24]

Improvements depend on increases in both numbers of rural doctors and versatility in utilising the opportunities.

Since no other workers regularly operate such hours, there is an apparent need for research into both the clinical need for such hours and acceptable solutions.

C. COMMUNITY EXPECTATIONS.

Very little is published on the attitudes of rural communities to their health needs with the notable exception of Humphreys J.[16,28,29]

I am unaware that governments locate and fund health facilities on any considered logical system based on population needs. Some ratios of Hospital beds to population pop up but their basis is unclear.

Mostly hospitals and other facilities are funded according to political pressure exerted by rural communities on their own behalf. Since this is a function of perceptions of need, one might expect that some studies might have covered the apparent requirements of rural communities. Literature search reveals almost nothing. (The outcry when a doctor is not replaced in a town speaks volumes but is not evidential of need).

I wonder if an area of public expenditure that swallows 8% of the Gross National Product might not deserve closed study!

Of the critical areas of RECRUITMENT, TRAINING and RETENTION of Rural Doctors I have centred on the least well researched component, RETENTION I have drawn attention to the relative dearth of information and research on the social family and professional causes that have been suspected or demonstrated to be responsible for rural doctors leaving the country, and I have suggested areas where studies appear most needed.

Since there is little value in running the taps into a bath with the plug out, it seems that endeavours should be made to fund research, particularly qualitative studies, on the factors that limit the stay of well trained country doctors in rural practice.

The Rural Doctors Association of Queensland is proud of its achievements in the last six years in forwarding the care of rural patients and the professional and social aspects of the lives of rural doctors.

My colleagues and I stand ready to assist and support research and programmes that cement those advances |

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SELECTION
PRE UNIVERSITY
TRANSFER

TRAINING
UNIVERSITY
TRAINEE

RETENTION
PROFESSIONAL
FAMILY
COMMUNITY ATTITUDE

SELECTION

Pre-university
- School Careers staff contact
- Mentorship and practice visits
- Work experience
- Affirmative selection of rural pupils

Transfer
- Voluntary Provider Number control in areas of excess
- Facilitated transfer to rural practice with training ==RIP
- Remote community support grants
- Reduction of marginal value positions in Rural Health Authorities

TRAINING

University
- Affirmative selection students and partners from country
- Student attachments
- Mentorship
- Rural Clubs

Trainee
- Compulsory rural attachment for all trainees
- Mentorship
- Adequate access to RACGP Rural training scheme
- Increased Medicalisation of RHTUs
- Cadetship or Bonding

RETENTION

Professional

- CME training with Locum support (RHSET & RIP)
- Study Leave
- VMO fee for service in rural hospitals
- Facilitated entry to training schemes
- Appropriate Role Delineation of Rural Hospitals
- Guaranteed reentry to city practice.
- Fostering by city practices
- Satellite communications
- Doubling up Doctors
- Divisional projects.
- Hospital Staff training

RETENTION

Family

- Preview of rural location
- Jobs for partners
- Job Sharing
- Leave transport subsidies.
- Locum and relief provision
- Policy not to permit excessive working hours
- Education grants for children.
- Pastoral Care

Community Attitude

- Work experience
- Affirmative selection of rural pupils
- Transfer

RURAL MEDICINE IN AUSTRALIA 1987-1994
A MODEL FOR THE IMPROVEMENT OF THE MEDICAL CARE OF COUNTRY PEOPLE

Alan Wallace — Australia

ABSTRACT

This paper details the perilous state of rural medicine in Australia in the late 1980's, and discusses the steps which have been taken to address the problem.

The concepts which were devised in response to the situation are described in detail. These include the notion that addressing the health care needs of country people implies, among other things, improving the training and the working environment of the people who provide that care. Implementation of these ideas led firstly to the establishment of medico-political organisations such as the Rural Doctors Associations and of educational bodies such as the Faculty of Rural Medicine of the Royal Australian College of General Practitioners (RACGP). Advocacy by these and other organisations led to the establishment by the Government of programs such as the Rural Health Support, Education and Training program and the Rural Incentives Program.

The process by which country doctors integrated themselves with the mainstream medical profession on one hand and with other rural health professions is also presented.

Some of the pitfalls inherent in the conceptualisation and implementation processes are identified, and some broader comments are made on the implications of this experience with respect to solving the problems associated with the provision of first class health care in Australia.

It is hoped that a review of the Australian situation will be useful to those facing similar problems overseas.

More than the price of wool was falling in 1989. The numbers of doctors entering rural practice was dropping. The training they were receiving was becoming less and less relevant to the job they were being expected to do. It was becoming effectively impossible to obtain any real training in procedural medicine at all. The standards of health care facilities were running down. Rural nurses were becoming dispirited. The desperation of Rural Allied Health Personnel was not a particularly noteworthy feature of this gloomy landscape. This is because there were effectively none of them. A particularly odious form of bureaucrat, the rationalist economist, was multiplying rapidly in Government departments. This little animal is as cute as a bunny rabbit and about as good for the environment. He wields a genuinely deadly weapon called "The Bottom Line" which he defines as he pleases, and which entitles him to do virtually anything he wants to. On this occasion, what he wanted to do was to close or downgrade country hospitals. This was a bit disappointing considering that, next to the pub and the racetrack, they are an Australian country town's most valued resource and that such scientific evidence as does exist supports the notion that small country hospitals are quite cost efficient, when such items as the transport, and accommodation of patients and other sundries such as visits by relatives are factored in to the equation. These lines do not appear above our rabbit's "Bottom Line", a fact which leads one to wonder why he refers to it as the "Bottom Line" at all. There seems, outside of his own flawed arithmetic to be no evidence at all to encourage him in this pursuit. I'd like to do a little study on the habitat of this little rodent, in which I measured the distance from his burrow to the nearest medical, paramedical and hospital facilities (a few kilometres perhaps) and his private medical insurance status (positive, I suspect). None of the usual Government bodies seem willing to find such a project. He succeeded, too, in his effort to downgrade other people's health care, in every State of Australia except Queensland. He would have managed here as well except for the process which I am about to outline. But more of it, and of him later. Here in Queensland the Government was and still is in the habit of sending young doctors in their post intern year to do relieving stints in one doctor towns up to 500km from the nearest medical help. Most of these competent individuals manage not to kill anyone. All of them get the fright of their lives. Few of them return to country practice. There is a silver lining to every cloud, however - these doctors do not join their city brethren in pouring scorn on the standard of medicine practised by their country colleagues.

I trust I have painted a bleak enough picture. Would anyone like me to go on?

It is, of course, in such adversity that great ideas are born. The purpose of this paper is to outline to you the response of the country doctors who found themselves in such adversity, firstly because I believe that it is a story which ought to be told for its own sake; secondly because I believe the concept is breathtaking, thirdly because the ways in which it was implemented illustrate most of the pitfalls of such a process, and finally, and most importantly because I believe that the concept and its means of implementation are exportable in whole or in part to other countries where similar problems are being experienced. It is a story about doctors, and there are therefore places in which its applicability in a nursing or allied health setting is limited. Nevertheless, as a methodology of empowerment I believe its fundamentals are valid for all groups of rural health care professionals, and very likely for other rural bodies as well.

The content of medicine has been researched virtually entirely in major centres of learning in large metropolitan areas. The process by which this knowledge is used in the care of sick people is likewise developed in big cities. This knowledge and process becomes the state of the art and the standard by which *all medical* performance is judged. Laws are made and Government health care policy is generated with these standards and processes in mind. Underlying this knowledge, and the processes of health care, and the policies and the laws that are made as a result, are the circumstances of metropolitan life and in particular the proximity of specialised medical, nursing, hospital and allied health services. The universal availability of these services almost wherever medical knowledge is generated leads to a series of assumptions concerning their practical availability which often renders this knowledge and more particularly the processes, laws, standards and policies which arise from it, less than "user-friendly" to the rural or isolated doctor and more importantly to his or her patient.

There is therefore a need to develop methods of delivery in rural health care which enable country people to receive health care which is clinically first rate, culturally and emotionally appropriate to patients, and economically feasible. These goals used to be and in many cases still are widely held by city-based administrators and politicians to be mutually unachievable. The Australian experience is that this is not the case.

Earlier in this address I mentioned, with considerable disparagement, the rationalist economist. I hope you will forgive me this piece of hyperbole, particularly any of you who are rationalist economists. Actually, in my experience the politicians and bureaucrats who frame, enact and administer the laws, statutes and regulations which govern us are by and large men and women of intelligence and compassion. The fact is that they work to a political and social agenda which is somewhat different from our own. The exigencies of rural life are not second nature to them. They are not aware that the solutions they proffer to our problems contain at their foundations assumptions which are not valid in rural and remote areas. In particular the human and economic cost and the awful compromise which is involved in accessing services that are many hundreds of kilometres from home is not obvious to them at a visceral level. If we are to succeed in changing the system it is essential that we devise a means of giving these people an intestinal understanding of the problem with which they are dealing.

During my time as a GP in Longreach in the outback of this state, I frequently asked doctors and employees of Queensland Health how they would feel about coming to Longreach for their operation, chemotherapy or what have you. Invariably they were horrified. Having got the visceral reaction I wanted I would then challenge them to tell me why a country person should not be similarly horrified at the thought of having to go to Brisbane for the same treatment. A few of them genuinely thought about the analogy. Most rejected it without thought. If I was feeling particularly obnoxious, I would ask this group how they would feel about having their treatment in Buenos Aires, pointing out that the Royal Brisbane Hospital is at least as foreign an environment to an unsophisticated country woman as a major South American hospital would be to them.

The point of this procedure is of course, not to bully people, but to get them to think in personal, emotional terms of what the consequences of their decisions really are. It is only then that they really begin to see. And when they do, there is one less person who is part of the problem and one more who is part of the solution.

We cannot, in fairness, expect people to understand a way of life to which they have had effectively no exposure. If they do not understand it is up to us to make them understand in a visceral as well as an intellectual way. In the end, it is by each of us, at every opportunity, taking the time to show city people in a personal way why the everyday assumptions of city life are inapplicable to the rural and remote setting that the battle will ultimately be won.

The first and without doubt most important step of the rural medicine movement in Australia was to form a political association. It is not, of course enough to do just this. The peculiar features of the Rural Doctors Association of Australia which led to its remarkable success bear examination, not just because they represent a fascinating tale and an interesting vignette in modern rural folklore, but because there is much in the story to guide other groups in producing a similar result, and because many of the pits into which RDAA fell may well be avoided by other bodies if the intricacies of the story are known to them.

RDAA was formed as the result of the federation of a number of State associations, of whom the Rural Doctors Associations of NSW and Queensland were the first. These organisations grew as result of two things. There was an increasing dissatisfaction among country doctors about the service they were able to offer their patients. This had arisen because the benefits of the stupendous developments in medicine over the past twenty-five years had in major part not flowed on to the people of the bush. The reasons for this are complex and involve not only the problem of metropolitan assumptions which I described before, but also problems of access to care for their often unsophisticated populations and also the rise of specialist college training programs and of subspecialist medicine.

For those of you who are unfamiliar with the Australian system of training in the medical specialties, I should explain that this training is the responsibility of an academic association of practitioners in each specialty called a "College". To digress, because I like digressing, it is truly remarkable how many of these bodies announce their patronage by the British monarchy by the attachment of the adjective "Royal". Many of you will be aware of the debate concerning an Australian republic which is ongoing at the moment, and of the leading role in that debate which is being taken by our gentle and softly spoken Prime Minister. My contribution to that debate is simply this, that the phenomenon of Australian loyalty to the Crown is remarkable, given that so many of our forebears came here because they were deemed, by officers of that Crown, to be unfit to remain in the British Isles. In any event, one of the results has been that in Australia the responsibility for the training of medical specialists has resided with the Royal Colleges. Twenty five years ago, with the assistance of the Flying Surgeon, doctors in rural Queensland were capable of delivering most of the medical care their patients required in the town in which they lived, up to a standard accepted by the medical profession as reasonable. As the practice of Medicine became more complex they found that they were unable to equip themselves with the necessary knowledge and techniques, because these techniques were complex and unusual, and required expensive equipment which their hospitals could not afford. Saddest of all, even when the equipment was available and the technique relatively easy to learn, the specialist colleges, in the name of the maintenance of standards would not permit the training of GPs in these techniques. There is a theory that this restriction of GP access to procedures arose from more pecuniary considerations, but that of course is nonsense. In any event it led to a cost, unseen by rationalist economists, and appearing above the bottom line only of those who paid it in terms of unnecessary death and human misery, and by those who watched and knew the reason why.

But why, I hear you ask, did it take you twenty years to do something? Well the answer to that is that we were isolated each of us thinking the same thoughts in virtual ignorance of each other and certainly with no idea that we had the power to do anything about it. But then three things happened simultaneously which empowered us to change the system. The first was the teleconference, the second was the fax machine and the third was a unique group of human beings of whom the major two were undoubtedly Col Owen and Bruce Chater. Under the leadership of these two and with the benefit of the newly available communications technology, RDAQ, RDANSW and subsequently RDAA and the other State associations were formed.

The benefit of a well organised political voice for your interest group cannot be overestimated. In this world little of lasting value is achieved without the use of more money than people have lying around as loose change. Governments and major professional organisations are useful sources of such funds but they respond only to well organised political voices and not to those of individuals. Our experience was that once we had formed an association we could issue press statements which were critical of the state of rural health and that the press, particularly the country press, was only too keen to publish them and to give them air time. None of you will be surprised to learn that this allowed us to make appointments with Ministers who had previously been far too busy to see us.

The next important point is that when we went in to talk to Federal and State Governments and the Royal Australian College of General Practitioners, we talked not only of problems but of potential solutions. This apparently set us apart from many of the organisations lobbying these institutions and caused us to be looked upon more favourably. Several very interesting things happened next. The first was that we were told that this was all very interesting but that:

(a) Where is your data?
(b) We are already addressing this problem.
(c) There is simply not enough money around for us to throw at each sectional interest group

or on a very good day:

(d) That's a very good idea and we'll build it in when we're framing next year's budget.

Now it's important to realise that a politician's priorities work this way:

(a) Getting (and staying) elected
(b) Saving money
(c) Provided neither (a) nor (b) is compromised, doing some good for the people

And a senior bureaucrat's priorities work this way:

(a) Getting promoted
(b) Saving money (this relates to (a))
(c) (Usually) making his/her boss look good. (This relates to (a))
(d) Provided neither (a), (b), nor (c) is compromised, doing some good for the people

What is important about these lists is to realise that there is a way to a politician or a bureaucrat's heart. Roundabout, even convoluted it may be but deep down inside them there lives a spark of good, and if you can organise your request so that it takes into account their higher priorities, you're in with every chance of success.

So. We framed our proposed solutions in ways which would make the politicians look good when they announced them to the electorate. We made them into proposals which would result in a net saving of money (this is not hard when you compare the cost of providing care in people's home towns with the diabolical cost of sending them away). We let them know that we could and would damage them in the press if they were not a party to reasonable progress in these matters. Easy, isn't it! Well, it is when you say it quickly.

Quite seriously, I should mention a few of the pitfalls of giving information to the press which is detrimental to a politician's priority (a). Hell hath no fury like a wounded pol. Some of my colleagues have had their livelihoods threatened by politicians and bureaucrats who felt that their interests were threatened by statements these doctors had made. These naive people had thought that they were merely using their right as citizens of a democracy to exercise free speech in the defence of the communities they serve. It is a strange irony that government officials should feel justified to act in this way, and that the Government should allow them to do so, in a nation which presumes to stand in judgement of the human rights record of its neighbours.

The Federal Government then changed its approach to us and gave us a job to do. It asked RDAQ to organise a National Rural Health Conference, in February 1991. We were asked to do this in October, 1990. Now as I have only recently learned this was at the time the largest community consultative process which the Federal Department of Health had ever undertaken. And for those who have come from overseas, I should point out that from early December to mid-February is the summer holiday period in Australia, known locally as the "silly season" because during that period absolutely nothing gets done. Fairly recently I heard in a speech made by our State Minister for Health that "the world is changed by the people who stay behind on Sunday to do the photocopying". Well, I don't know if we changed the world, but we sure as hell stayed behind and did the photocopying. And in doing so we achieved this. We demonstrated that we were capable of delivering, as well as of complaining. The National Rural Health Strategy was endorsed by that conference. It was a document with many flaws written in the most diabolical Bureaucratese, but it contained a blueprint for the first serious reform of rural health in the history of this nation. As a political force RDA was on the map, and there, in spite of many predictions to the contrary, it has stayed.

The moral of the story is that when you get your chance you have to take it, and that it is achievement in small detail that leads to victory on a grand scale.

For victory it was. There followed a succession of Government grants and programs, aimed first at rural health (the RHSET program), and then at rural medicine (the Rural Incentives Program), and finally at General Practice as a whole, in the Divisional Grants Program, of which rural medicine gained a reasonable share. So much so that recently a rural nurse complained to me, without overly stretching the truth, that "the Government is spending $214,000,000 on doctors, and not a penny on nurses!" Such was the extent of the empowerment which the above process enabled.

Success in this arena made it possible to effectively represent our communities politically and ourselves industrially. By the way, I learned that in an industrial negotiation, always go in asking for improved conditions rather than more money. You can generally justify a vast improvement in conditions of service much more easily than you can an increase in money, especially to city-living bureaucrats who would rather die than live in the bush. You take them by surprise, which is always a good thing to do, and generally they will try to persuade you to accept a small improvement in your conditions of service and a pay rise.

However, in a country where the education of rural doctors is in the hands of a non Government body this is not enough we needed a body which could organise our education for us. Time has justified the view we took, which was that it was necessary to separate the academic body from the political one, even if a lot of people wore two hats. It allows for two desirable things; that when your members get sick of you politically they aren't forced to choose between their political view and their education, and that in negotiations with learned Colleges, there is somebody to wear the black hat and somebody else to wear the white one. We found the way this expedited negotiations entirely satisfactory.

I suspect that in your own disciplines and in your own countries you will have found as we did that negotiating with your own mates was considerably more difficult than negotiating with the Government. The reason for this is that while most of your mates will be on your side, at the top end of any organisation there are a number of individuals who oppose any change, especially change initiated by a grass roots organisation. Some, let's face it, do so because they have grown used to power, like it, and view any change both as a threat to it and as a chance to use it. Fortunately in the case of our College these people were a very small minority. Others, and they are far more common are what a friend of mine calls "ancient venerables" - people who have spent a lifetime in the service of their College, love it dearly, and are nervous that any change might harm it. The problem really is that the nasty ones play on the fears of the nice ones and it makes things very hard to achieve. Here are a number of the tactics they used.

The first was to ignore us and to hope we would go away. Some people showed a surprising tenacity at sticking with what I term the ostrich defence long after it was obvious that it was unlikely to be effective. This is not difficult to endure. The next stage was simultaneously to tell us that they would attend to all our worries if only we'd please shut up, and behind our backs to inform the Government and anyone else who would listen that we were a dangerous, unrepresentative rump bent on destroying or at the very least stealing from them, and that by the way, every thing was rosy in the bush because they'd taken care of it. I often thank the stars for the length of time they spent in the ostrich defence, because by the time they moved into stage two, we had already established with most other parties that we were energetic and sincere and at least deserved to be listened to. Eventually it became clear that they would have to parley. Now this is where it gets difficult, and where it helps to have some experienced negotiators on your side. Because what you get offered will always be less than what you want, and it may be that the opposite side is not prepared under any circumstances to give you what you need. The trick is to come out with nothing less than what you need and to know beforehand what that is.

In our case the negotiations started after the resounding success of the National Rural Health Conference. After something of a wrangle we were allowed to form a body called the Rural Medicine Committee of Council. We were given a budget of $25,000. We lobbied the entire College hierarchy and on May 11 we obtained permission from Council to address them on the subject of "The Approval in Principle of the Establishment of a Faculty of Rural Medicine" on June 8. Documentation including aims, objectives, workplans, budgets, and a suggested revision of the College Memorandum and Articles of Association, Regulations of Council and Faculty ByLaws, had to be made available two weeks in advance of this date for the consideration of Members of Council. I think I said before that the world is changed by the people who are prepared to stay behind on Sunday to do the photocopying. Rarely was it more true than in those heady days in the winter of 1991.

Well the papers were prepared and distributed, the Faculty was approved in principle and in the fullness of time came to be. The story could go on, through the development of curricula in the various areas of procedural medicine, the setting up of Joint Consultative Committees with the specialist colleges, the development of a rural training stream in our own college, and the development of a postgraduate diploma in Rural Medicine. But these while of great importance to us, are really details for you. Because the really important things are money, and structure. If you have enough money, or even some money, and good organisations with access at the appropriate level to Government and other bodies, the rest is just hard work. And while this has been a fairly down home story about a little organisation in a little country on the wrong side of the world, I hope that in the story of its successes and its difficulties there is something for all of you to take home.

FACTORS INFLUENCING RURAL AND REMOTE AREA RESIDENTS' DECISIONS TO SEEK HEALTH CARE

P.C. Veitch — Australia

ABSTRACT

An interview survey of 322 residents of a rural area and 474 of a remote area of Queensland sought to determine the importance of various physical, temporal, social, economic and emotional factors on respondents' health care behaviour. Respondents rated the importance of each of 21 items from 1 = 'not at all important' to 6 = 'extremely important'. They were also asked if they had ever been stopped from seeking care in 16 of the items.

The seriousness of the condition was overwhelming the most important consideration. There were however considerable differences recorded according to respondents' location. People distant from health care services placed considerable importance on the distance and time taken to reach these, as well as road conditions and the time of day. People closer to services, particularly town dwellers placed greater importance on the day of the week, taking time off work, pressures of work and costs. Perceived quality of care had both immediate and long-term impacts on health care decisions and behaviour.

The results are discussed with regard to alleviating the stress caused by some of these issues, particularly in terms of alternative strategies and technology.

INTRODUCTION

In Australia in recent years, rural health issues have attracted increasing attention, particularly the shortage of rural practitioners. Various strategies have been employed to increase the numbers of rural medical practitioners, specifically through appropriate training and support. However, while increasing the supply of rural medical practitioners and improving their preparation for rural practice are urgent priorities, it is also necessary to better understand the issues which influence rural residents' health care decisions.

Much has been written of the difficulties faced by rural health care users, both here and overseas [1-4]. In common with much of the western world, health care facilities and services in Australia are maldistributed, with disproportionate concentrations in major urban areas [5]. Table 1 characterises the rural health services extant in many western countries. Rural health services are predominantly primary care based, and often supported by small hospitals with limited facilities and staff. Rarely are permanent specialist services available, although certain specialists may visit on an occasional basis. The population doctor ratios in rural areas are considerably higher than in urban areas [6].

Australian rural communities, particularly inland communities, have access to a limited number of sparsely distributed facilities and services [2,7]. In general, facilities become more limited with increasing distance from major urban areas [8]. Indeed, many communities do not have direct access to a permanent medical practitioner. In the most isolated areas, communities are served by a nurse, supported by the Royal Flying Doctor Service (RFDS). Solo GPs, usually working within a small community hospital, are in some small towns. These practitioners often have 'Right of Private Practice' which permits them to see patients on a private basis, in addition to their public patients. Within each region there is at least one hospital with several medical practitioners and a limited number of specialist services.

TABLE 1

CHARACTERISTICS of RURAL HEALTH SERVICES
Primary care based
Hospital based
Limited facilities
Limited staff
No permanent specialist medical staff
High population to medical practitioner ratios

Within this context, distance has long been seen as an important influence on rural residents' health care behaviour [9]. Studies based on utilisation data usually indicate an exponential decline in utilisation with increasing distance [10, 11]. In the broadest sense, distance impacts at two levels: on decisions to seek local health services; and when seeking care further afield. While the former tends to be consumer driven, the latter is more often provider driven [12]. Thus, two distinct sets of issues need to be considered.

Very little analytical work has been done in Australia to identify the parameters which influence rural consumers' decisions regarding health care [1]. It has been argued, for example, that "people remote from permanent health facilities may neglect minor symptoms, because of the difficulties and costs associated with accessing services, and distance often leads to delay in treatment and increased costs" [13, p 63].

This tends to be repeated for specialist services, although the risks/outcomes are potentially more serious. As an example, the author worked as a Radiation Therapist for fifteen years. That experience highlighted three outstanding differences between radiotherapy patients from rural/remote locations and their metropolitan counterparts in Queensland. Firstly, rural people generally presented with more advanced disease. Secondly, there was an annual 'influx' of these people during the period of the Royal National Association Exhibition (a predominantly primary industry event held in August each year which is attended by many rural folk). Thirdly, these people endured considerable financial and emotional hardship during the four to six weeks of their radiotherapy treatment, by having to remain in Brisbane during that time away from the support of family, friends and source of income.

This paper presents findings from two surveys aimed at eliciting information about the factors which influence rural residents' health care decisions. Firstly, the issues which respondents indicated were important influences in their decisions to seek local health care are addressed. Secondly, problems which they encounter when having to go out of their areas for care are addressed. The surveys were conducted in two rural areas of Queensland - one in the south-east, and the other in the central-west of the state.

OUTLINE OF THE STUDY AREAS

Figure 1 displays the relative size and location of the study areas within Queensland. The population of the south-eastern area was 10, 200 at the 1991 Census [14]; and 11, 800 lived in the central-west area. For the purposes of this account, the former is termed 'coastal', and the latter 'inland'.

The coastal study area, centred on Kilcoy Shire (Local Government Area), covers approximately 3000 square kilometres [14]. The area receives lower rainfall than the adjacent coastal strip, because of the shielding influence of the D'Aguilar Range. Daily temperatures range from less than 10oC in winter to as high as 40oC in summer, with annual mean temperatures of 18 - 20oC [15].

Much of the area is upland, of volcanic origin, although the upper Brisbane valley provides a narrow strip of alluvial plainland [16]. Open forest exists in much of the northern and western portions of the area, while elsewhere, extensive land clearance has occurred [17]. Economic activities include dairying, beef grazing and meat production, forestry and mixed cropping.

The area is characterised by small-holdings (generally less than 160 hectares), with rural sub-division occurring near the eastern and southern boundaries. Towns (of up to 2,000 persons) are separated by distances of 20 - 30 kilometres, along good quality sealed roads, usually of two lanes (one in each direction) and occasional stretches of three and four lanes on the major highways. Electricity, telephone and daily mail services are available.

The inland study area, centred on Longreach Shire, covers some 204,298 square kilometres [14]. Average annual rainfall is less than 500 millimetres, declining to as little as 200 millimetres in the far west of the area [15]. Daily temperatures range from less than 10oC in winter to well over 40oC in summer, with mean annual temperatures of 21 - 24oC [15].

Open Mitchell grass downlands comprise much of the area, where sheep and cattle grazing are the major activities [16]. The downlands give way to mulga-woodland towards the south-east [17]. Downland and woodland properties tend to be family-owned and range from 100 to 400 square kilometres in area, with homesteads usually 20 to 40 kilometres apart. These areas are characterised by remote urban settlement, with the principal towns 100 - 200 kilometres apart, along road-rail corridors [18].

While most of the major road routes are sealed, nearly all shire roads are unsealed (graded). The towns are the local service centres for the pastoral industry. Public-sector activities tend to dominate, with 40 percent or more of the workforce so engaged [16]. There is a limited range and choice of services and outlets, and "consumers must accept smaller, less specialised, poorly stocked outlets offering limited choice" [16, p 144]. Reliable, direct-dial telephone services have only recently been made available to the entire area (in August, 1992), although electricity is not available in all parts. Weekly, or bi-weekly mail services are common in the non-town areas.

Towards the western extreme (beyond Winton and Stonehenge), lie the "lightly grassed, rolling stony downs, which degrade westwards into the harsh gibber deserts ..." [16, p 156). Large, company-owned cattle stations, of more than 2,000 square kilometres, are the principal forms of settlement. Workforces of 10 to 20 people (predominantly male) permit the internalisation of many service functions [16, 18].

During the 1960s and '70s, many of the towns in the area lost up to 40 percent of their populations, as rural wage-earners were paid off [16, 18]. A combination of drought, low wool prices and increased labour costs was responsible. The rate of loss slowed during the 1980s, although some towns continued to decline. The prolonged combination of drought, low wool prices and recession during the last four to five years has resulted in a further loss of population. However, unlike the earlier period, landholders have constituted the bulk of outmigrants, forced from their properties by insurmountable debt.

HEALTH SERVICES AVAILABLE IN EACH AREA

The public hospitals available to inland area residents are similar (in terms of capacity, staff and facilities) to those available in the coastal area, with the exception of the regional hospital in Longreach. Private general practices account for most of the generalist medical care provided in the coastal area locations, whereas hospital-based general practice is more common in the inland area. Hospital-based medical practitioners have 'Right of Private Practice'.

The greatest contrast between the two areas relates to the number and level of health care services available beyond each area's boundaries. Most residents of the coastal area have all the facilities and practitioners available to the residents of Brisbane, Ipswich and Caboolture cities within 60 to 90 minutes drive. Those in the inland area are hundreds of kilometres and many hours of travelling from such facilities. For example, the closest city is Rockhampton which is 8 to 10 hours by road from Longreach, while Brisbane is 12 to 14 hours away by road, or 2 to 3 hours by plane.

SEMI-STRUCTURED INTERVIEW SURVEY

A preliminary survey, involving semi-structured interviews, sought to identify the issues and problems facing rural people when deciding to seek health care. Thirty town residents and 30 non-town residents from each area were randomly selected from the relevant electoral rolls. Information was sought regarding the householders' usual sources of health care, factors which influenced their decisions about whether, or not, to seek care, concerns about the availability of, and access to care. A total of 127 households were contacted (94% response rate). Because decisions to seek local care are generally consumer-initiated, and trips away from the local area are provider-initiated, these issues are covered separately. In the case of the former, the focus is on issues which influence the decision, while in the latter case problems related to making a trip away, and problems experienced with distant services are covered.

Local care

Respondents noted that condition severity and/or duration was influential in their decisions to seek care.

'If it's bad enough you go!'

'If it's serious, you go regardless of anything else.'

'If it's gone on longer than it should, it's time that it was seen to'.

Respondents often noted that they would seek care sooner for a child than they would for themselves, or another adult.

> 'If it was a child, I'd go straight away. If it was me, I'd wait and see'.

Distance and travel time per se were often seen by non-town respondents as 'part of living out here', whereas town dwellers often mentioned proximity to their local source as a benefit. Road and weather conditions were more often mentioned by non-town respondents as having some influence on their decisions to seek care.

> 'The road's so bad, I always think twice about going.'

> 'If it's raining, or the creek's up, we mightn't be able to get there.'

> 'Sometimes in summer, it's so hot that I won't take a sick child in the car'.

Time of day, day of week, and work considerations were also commonly listed as influencing health care decisions.

> 'We are so far out, that if something happens in the afternoon, we try to hold out until the next morning.'

> 'We try not to travel at night because of the kangaroos.'

> 'If it's Friday, I usually get it seen to, but on a Monday I'll tend to wait and see.'

> 'It would have to wait until the milking was finished'.

Costs, too, were mentioned. Some indicated that costs of various forms (e.g. travel, consultation, medication) were influential in their decisions, while others thought not.

> 'If you are sick, then you need to see someone regardless of the cost'.

Many non-town respondents noted that they would try and do other things, such as business and shopping, if they had to go to town for health care. In this way, they could alleviate some of the travel costs.

> 'I'd try and do others things at the same time'

> 'There's the cost of the fuel, and wear and tear on the vehicle to think of, so you try to make the trip worthwhile by doing other things while there'

A number of respondents in each area had been prevented from seeking care by one or more the above issues. They often qualified their replies in terms of their experience, by adding comments such as:

> 'that's what I would normally do, but if it looks like rain'

> 'I haven't been in that situation, but I know of others who have'

> 'generally, it's not a problem, but ...'

Going away

While those living in the coastal area were within 90 minutes drive of Brisbane, those from the inland area were many hours from specialist services. In the latter case, there were a number of visiting specialists who attended clinics at several of the hospitals at monthly, quarterly or half yearly intervals. However, respondents often noted that appointments for the visiting specialists were difficult to obtain, and were too distant in terms of time. Nonetheless, the general consensus was that visiting specialists provided a real option to travelling away. People also welcomed the increase in the types of specialists coming to the area, and the increasing frequency of their visits.

A number of issues were seen as potential problems when going away for care. These included the cost of the trip, accommodation and food, particularly if accompanied by family members. Isolation from family support was a major source of concern. Preparing for the trip, by making sure that all was in order at home, was also a major consideration. Urgent trips were seen as the chief impediment to organising everything at home. Some people mentioned that they were upset by cities, particularly the traffic, crowds and impersonal nature of such places. Some respondents indicated that they had decided against going away for specialist care, and were prepared to accept whatever care they could receive locally. Respondents also indicated that they had encountered problems, in terms of service, when they had gone away for health care. Some were told that their appointment had not been recorded and that they would have to return at a later date, while others were told that their records/results had not arrived. In general, respondents felt that the city-based health system did not appreciate the difficulties encountered by rural people when seeking specialist care.

STRUCTURED INTERVIEW SURVEY

The second survey took the form of a structured interview. The questionnaire was developed from the information collected during the interviews. Households in each area were selected from a sampling frame based on State and Local Government electoral rolls, augmented by other listings which included telephone and community directories, and local knowledge. A locationally stratified systematic sampling method was employed to select statistically reliable numbers in each distance range. The method also ensured that the complete range of distances and geographic locations were encompassed within the sample. Such sampling designs have been demonstrated to be more precise than random designs when locational control is desired [19].

The selected households were initially notified by mail of their selection and the survey's aims. Interviewers, specifically trained for this project, then contacted the households to organise an interview appointment with one adult household member. The interviewers were local residents, who were well-known in their areas.

Some 801 of the 881 households participated (91% response; inland area: 481/529; coastal area: 320/352). One hundred or more households were interviewed in each distance interval within each area (Inland: town; <50 km; 50 - 100 km; 100+ km; Coastal: town: <25 km; 25+ km). About 40 inland respondents were more than 200 kilometres from the nearest permanently staffed health care facility. These people fell within the RFDS zone, but more than half indicated that their usual source of care was a permanent facility. Some coastal respondents were as much as 60 kilometres from the nearest permanently staffed facility.

No significant differences were evident in terms of age, sex, education, income, or health-training, between the distance intervals in each area. Overall, however, the differences between the two samples were significant. In view of this, it could be argued that any consistencies identified in the patterns would strengthen the case for distance-related influences.

ISSUES INFLUENCING DECISIONS TO SEEK CARE FROM USUAL HEALTH CARE SOURCE

Respondents were asked to rate the importance of 21 issues in their decisions to seek health care (under normal circumstances). A six point scale (1 = 'not at all important' to 6 = 'extremely important') was used. Mean scores were calculated for each area and distance interval. Consistency in the patterns, in relation to distance, were assessed using one-factor, ordered analysis of variance tests. Respondents were also asked if they had ever been stopped from obtaining health care by any of 16 of these items.

Figure 2 sets out the mean ratings for each area. By far the most important influences on the decision to seek health care in each area were a condition's seriousness and duration, along with who the patient is (e.g. a child), and expectation of relief rate. No other issues were rated as important (mean score > 2) by costal area respondents. However, certain contextual issues were important to inland area respondents: multi-purpose trip (ability to do others in town); distance; travel time; weather; season; road conditions, time of day; and work pressures.

Figure 3 illustrates the mean importance of each issue by distance category in the coastal area. There was little difference, between distance categories, in ratings for the condition-related issues. Although not rated as important overall (mean scores < 2), several significant differences in the importance accorded to contextual issues were evident between the distance categories: distance, travel time; weather; trip costs, transport problems; and travelling. Some other issues displayed a dichotomous relationship, in so much as non-town respondents indicated similar ratings, but these were significantly different to town-dwellers' ratings (e.g. Multi-purpose trip; season; time of week; work pressures; permission; cost of medication).

Figure 4 illustrates the mean importance ratings by distance for the inland area. Respondents from all distance intervals accorded similar importance to the condition-related issues, with the exception of those more than 100 km from care, who placed greater importance on condition seriousness and duration, and who the patient was. Of particular note, is the unanimous rating accorded expectation of relief. Town-based respondents accorded similar importance to the contextual issues as their coastal area counterparts. Consistent distance-related trends were evident for a number of contextual issues: multi-purpose trip; distance; travel time; weather; season; road conditions; time of day; work pressures; recency of last trip to town; recency of last trip for health care; trip costs, and travelling. Consultation and medication costs were not rated as important in decisions to seek health care, regardless of distance.

Finally, inland respondents who had been prevented from seeking care tended to rate the importance of the offending issue 2-3 times more highly on average than those who had no such experience. Coastal area respondents who had been prevented from seeking care rated the particular issue 1-2 times more highly than those not so affected.

Discussion

The results raise several considerations. Firstly, condition-related issues are the most important influences in decisions to seek health care. This is in line with the literature which indicates that severity is the major influence on health seeking behaviour [12, 20, 21].

Secondly, none of the contextual issues were important in coastal respondents' health care decisions. People living in the coastal study area often have a number of alternative sources within 20-25 kilometres, on good, sealed roads. Thus, such issues as raised here are of little importance in their health care decisions. There are, however, some people who, because of poor quality tracks, encounter much the same problems as isolated inland respondents.

Thirdly, concerns about condition seriousness, duration and the patient appear to be exacerbated by isolation (more than 100 km from care). In other words, isolation appears to heighten awareness of potential seriousness. This is a form of stress and it is little wonder that they phone for advice/reassurance. The qualitative interviews suggested that isolated people need to make broader judgements about the likely progress of a condition, because of the travelling factor and so seek advice from others (lay or professional). Considerations over and above the course of the condition, are needed, such as the time of day, day of the week, weather and road conditions. "Wait and see", might not be an option so much as a necessity to these people.

Fourthly, town dwellers in both areas attach similar levels of importance to most issues. The types and levels of locally available facilities and services are similar in both areas, suggesting that town dwellers' ratings provide a useful baseline against which to compare more distant results. The similar levels of importance accorded to these issues by all town-dwellers suggest that the measures are valid. Similarly, the similar ratings accorded 'expectation of relief' provide a further indication of validity.

Fifthly, contextual issues become more important with distance. The pattern is evident in each area, although especially marked in the inland area. The increasing importance of seasonal issues with increasing distance reflects the likelihood of being prevented from seeking care by such issues. In particular, it reflects the limited choices and considerable tracts of unsealed road to be traversed when care is needed. The qualitative interviews indicated that such concerns are a source of stress to isolated people in two ways: latent stress - 'What if something happens today?'; and in reality: 'What do I do now? How far will I get with the creeks up?'

Sixthly, distance and travel time were not rated as highly as other contextual issues such as weather and road conditions. Distance and travel time are probably relatively less important, because they are in effect constant. Distance never varies, and travelling time, under normal circumstances, varies little. Thus, respondents in the qualitative interviews often dismissed distance and travelling time as being 'part of living out here'. However, seasonal conditions impact on work, weather and road conditions. The negative impact of any of these issues on health care decisions is exacerbated by the distance to be travelled. Similarly, the further one has to travel at night, the greater the chance of hitting a kangaroo or stock, so time of day considerations also come into play.

Seventh, cost considerations are not important influences on health care decisions, because 'if you need health care, you'll find the money'. In addition, consultation and medication costs are similar regardless of an individual's location. Costs might vary slightly between sources, but not enough to impact on decisions. Trip costs are of some concern to more distant people, but can be alleviated if other things can be done while in town (hence the increasing importance of multi-purpose trips with distance).

Those with previous experience of being prevented from seeking care because of one of the listed issues rate that issue more highly. This suggests that experience enhances awareness of possible difficulties. This may be double-edged, in so much as latent stress may be increased, or suitable precautions set in place to counter such problems.

Finally, the proportions of people with previous experience of being prevented from seeking care increases with distance. Thus, these people would appear to be under the greatest stress in terms of health care. One is forever on the 'alert' in case of accidents, snake bites, and sudden illness, but there are also the stresses associated with transporting the sick or injured to care, or waiting for assistance to arrive. Those unable to manage such stresses tend to move on [22].

PROBLEMS ASSOCIATED WITH SEEKING CARE AWAY FROM THE LOCAL AREA

Respondents were asked to rate how much of a problem each of eight issues would be if they had to go away from their local area for medical services. A five point scale was used (1 = 'no problem' to 5 = 'very serious problem'). In addition, those respondents who had been away for medical care were asked if they had encountered problems with any of eight issues.

Figure 5 illustrates the proportions of coastal area respondents indicating the degree of problem that they anticipated they would encounter when going away for care. The urgency of the trip (i.e. having to go almost immediately) was anticipated to cause the most problem, closely followed by accommodation and food costs. Preparing for the trip (making sure everything at home was in order) was the issue next most likely to be a problem. The order was the same whether considering any degree of problem, or at least a major problem.

Figure 6 illustrates that the majority of inland respondents anticipated problems of some sort. Again, urgency of the trip was considered to be the most likely cause of problems, closely followed by preparing for the trip. The lack of family support and trip-related costs were the next most likely sources of problems. The order was the same whether considering any degree of problem, or at least a major problem. Seventy-two percent of coastal area and 63% of inland area respondents had sought care away from their local areas. The most common problem encountered by these people, on their last trip, was an apparent lack of understanding by the staff at various facilities of the transport and distance problems faced by rural people (22% of coastal and 29% of inland respondents). Thirteen percent of coastal area respondents reported that the doctor they were supposed to see was not available. Nine percent of coastal, and thirteen percent of inland respondents were required to stay away longer than anticipated because of delays in diagnosis/treatment. Nine percent of coastal respondents reported that nothing was done and they were asked to return at a later date.

Discussion

The results confirm that most rural people, regardless of location, envisage problems, of some sort, in relation to going away for health care. In particular, the lack of control which attends an urgent trip is seen as the most likely problem. The need to organise things at home is also seen to be very important. People noted that a trip away for care would be extremely difficult at certain times of the year, for example when shearing or mustering. Dairy farmers noted the problems associated with getting someone to milk their herds. In addition, the further one has to travel for such services the greater the problems and stresses encountered. Concerns about costs and lack of family support suggest that extra stresses are imposed on inland respondents at these times.

There appears to be a lack of awareness, within urban-based services, of the extra stresses faced by rural people. Some sensitivity to the rural context, by people working in urban health services, would assist rural people at such times. It is disturbing that on their last trip more than 10% of respondents, in each area, encountered service difficulties which are preventable. Unforeseen circumstances will always occur, but a rate of 10% suggests there is room for improvement. There would appear to be a need for better coordination of specialist services, such that rural people are not unnecessarily inconvenienced.

CONCLUSIONS

In line with many illness behaviour studies, condition severity is the most important variable in decisions to seek local health care. Other condition-related variables are also important influences on health care decisions. The importance of these variables were generally unrelated to distance, although people more than 100 km from care did place more importance on severity and duration. The data suggest that distance, in a number of nuances, plays an important role in decisions to seek health care in rural Australia. In terms of the use of local services, the data provide evidence that distance per se is not the influential variable in people's health care decisions. Rather, it is contextual variables, exacerbated by distance, which are important. These include seasonal variations in work pressures, weather and road conditions. For some people these are almost as important in the decision process as condition severity. This is reinforced by other data collected in these surveys, but not produced here, which indicate that as distance from health care increases, people are more likely to delay seeking care for injuries of specified severity [23]. However, as injury severity increases, the impact of distance lessens. This conforms with the notion that distant people more often present with more severe symptoms, than those who are closer to health care [24, 25]. The logical extension of this argument is that the degree of recovery and long-term well-being of distant people is at risk [23, 26]. Different facets of distance impinge on the use of non-local services. In these circumstances, travel and accommodation costs are important, along with removal from family and community support. Indeed, in some cases, these considerations cause some people to decide against seeking non-local care, in turn jeopardising their long-term well-being.

It is widely accepted that rural people will never have immediate access to the same levels of health service as those which are available to urban people [1, 5]. Thus, ways in which the impediments of distance can be reduced need to be considered. This needs to be approached from both the provider and consumer sides.

Provider-side issues are beyond the bounds of this account, suffice to say that current measures are aimed at increasing the numbers of rural practitioners -medical practitioners, nurses, and allied health professionals. Recent Australian efforts in this regard have focussed on training, support and overcoming disincentives [6, 27]. The Federal government has also provided financial incentives to medical practitioners wishing to locate in rural areas [28]. It is too early to assess the success of these measures. Although the rural GP is the most valued health professional [29], similar measures need to be in place across all health professions. Commensurate with increasing rural practitioner numbers, is the need to increase their distribution across rural Australia, in order to reduce the maximum distances which consumers need to travel. Measures used overseas to increase accessibility to health care have included branch clinics, mobile clinics, and nurse practitioners [3, 26].

On the consumer side, the rural characteristics of self-sufficiency and independence "could be the basis of a valuable personal asset in terms of health promotion, rendering the individual more independent and defiant, less dependent psychologically on the services of others" [2]. Self-care has been demonstrated to be an important alternative employed by isolated American communities [25, 30]. Indeed, "self-care is truly the first level of health care - the real primary care. It is also the biggest part of the whole health care system" [31, p.37]). An education program designed to assist rural people to engage in appropriate self-care would reduce the stresses identified above, improve long-term well-being. People in rural New South Wales were shown to benefit from a dedicated health education program aimed at improving health care behaviours and knowledge [7] The program was demonstrated to be both effective and economic. A change in focus towards preventive health care in rural areas has been argued [13, 29].

Telemedicine, the use of telecommunication facilities to link rural practitioners with regional hospitals and specialist services, has been used in Queensland since the mid-1980s [32]. Improvements in rural telephone services and telecommunications technology might enable an extension of this concept to the remote patient provider level. Telephone consultations are commonplace for rural practitioners, and the RFDS conducts daily radio clinics. More than 30% of survey respondents, particularly those who were distant from care, indicated that they would telephone a health care facility for advice.

Informal support networks influence the use of rural health care services [4]. Rural communities, because of their small size, are commonly based on primary group relationships, thus:

> "the rural situation may accentuate the effects of primary groups on health behaviour. Special problems of access may exist on the basis of disjunctures of local communities and urban-based health care systems. In such a context lay consultants may have added impact on decisions and may be especially important as resources of access. The strengtha of primary group relationships in rural areas may in fact account for more of the differences between rural and urban health care utilisations than availability of services or differences in values" [4, p.187].

The semi-structured interviews indicated that non-town respondents often sought health care information or advice from neighbours and friends. Commonly, someone known to have nursing or health training was the source of advice. Perhaps some professional support for such networks would assist rural residents.

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FIGURE 2

Mean Importance Ratings in Health Care Decisions Inland vs Coastal Area Respondents

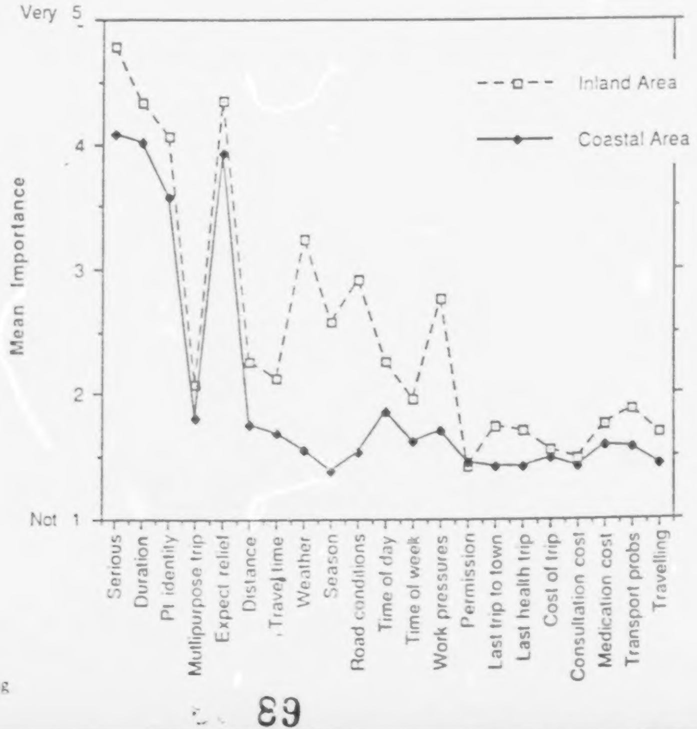

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Figure 1 was not available at time of printing

FIGURE 3

Mean Importance Ratings in Health Care Decisions
by Distance - Coastal Area

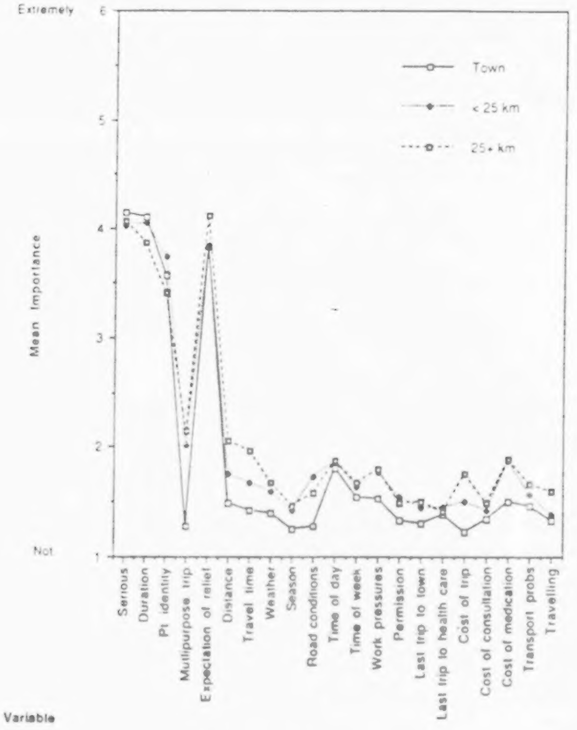

FIGURE 4

Mean Importance Ratings in Health Care Decisions
by Distance - Inland Area

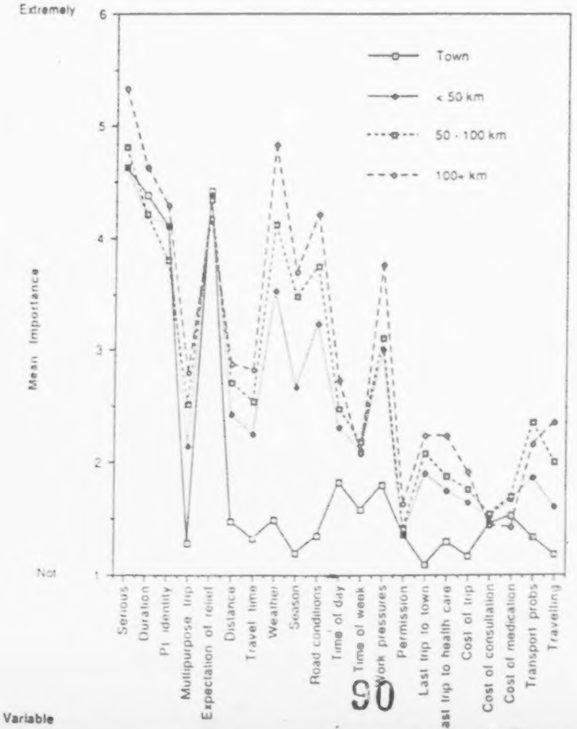

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FIGURE 5

Degree of Problem Encountered by Coastal Area Residents When Going Away for Specialist Services

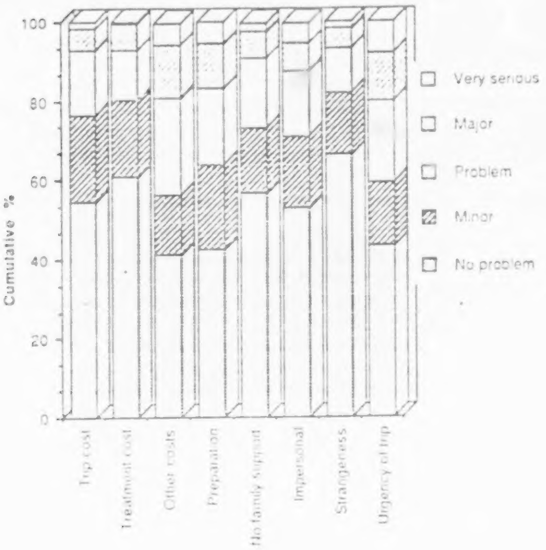
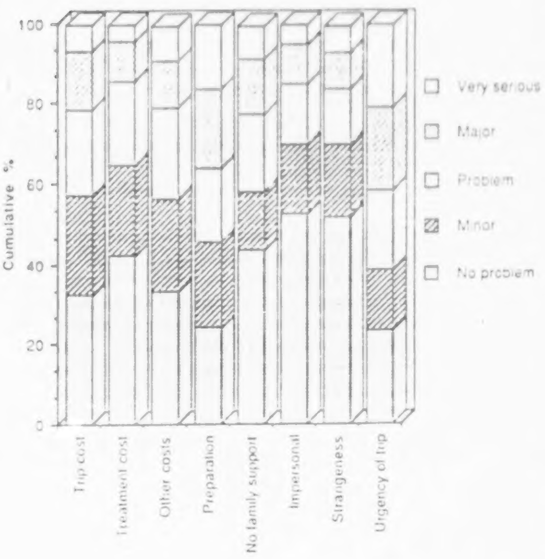


FIGURE 6

Degree of Problem Encountered by Remote Area Residents When Going Away for Specialist Services



ENOUGH BAD NEWS!

REMOTE SOCIAL HEALTH & ABORIGINAL ACTION IN A HARSH ENVIRONMENT — COOBER PEDY IN SOUTH AUSTRALIA'S 'OUTBACK'

Brice G, Agius T, Agius G, Edwards S, McCormack V, Williams J, Riessen C, and Brown B.
(The Aboriginal Health Council of SA Inc.)

'The indigenous peoples of Australia are the poorest, sickest, most ill-educated, most chronically unemployed, most arrested and imprisoned people in this country' (Dodson 1993:119) - Social Justice Commissioner of ATSIC.

But the story must not end there.

INTRODUCTION

The National Aboriginal Health Strategy, the Royal Commission Into Aboriginal Deaths in Custody, and the SA Aboriginal Health Chartbook all identify Aboriginal ill-health and reduced life expectancy as a continuing embarrassment to Australia's international reputation and so-called healthy national public policy. This paper responds to questions raised by the Umoona Community Council Substance Abuse Committee of June 1992 concerning (a) the role of alcohol, or heart or respiratory related problems in Coober Pedy Aboriginal deaths, (b) what is the relevance of 'environmental' or 'domestic violence' related issues to reported deaths?, and (c) how records kept by Aboriginal agencies compare with those of the South Australian Health Commission and the Australian Bureau of Statistics. We will return to these (empirical) questions later. A 5-year plan for the Umoona Community Council was prepared in 1990. It is currently under review - so one purpose of this discussion paper has also been to assist Umoona Community Council with that review.

Recent SA mortality data showed that Aboriginal death rates in the country were nearly 4 times that of their Adelaide city equivalents (that is, that in the country they were 18 times their non-Aboriginal equivalent compared with 'just' 4.6 times in the city of Adelaide) (SAHC 1993:89). Yes, this is startling, even given the normal 'colour' of Aboriginal health statistics, and we will return to other 'facts and figures' later, but before we do, we want to look at things a little differently.

From 'Four Corners' on our National TV network, to glossy coverage in 'women's magazines', Aboriginal health is renowned for its grim and graphic video footage - a continuous cliche of Aboriginal 'reality' that stands on par with that of Mozambique, or Somalia, or wherever poverty or misery attracts a news-hungry world, at least for a moment. 'Aboriginal health' is typically portrayed symbolically but not through traditional Aboriginal myth or spirituality – rather, through statistics, graphs, and charts. If we are serious about something, it 'must' be quantified . . . using scientific, valid and trustworthy 'facts'.

Two assumptions permeate this paper: firstly, that the grim realities of Aboriginal health cannot be denied, but that no statistical presentation can ever represent the complexities of Aboriginal social life and the diversity of Aboriginal communities. Secondly, that careful analysis of the underlying issues rather than merely the surface quantifications (and just as importantly, the local/regional definition of, and capacity to act on the underlying issues) still remains a rarity rather than a rule. There is a place for statistics, but we too often do not question their origins, meanings or scope. Therefore, what we don't need when we're talking about 'Aboriginal health' is either, more 'bad news' presented in isolation, or, superficial a-historical accounts of 'the problem' and 'the solution' – as if the 'remedy' is always straight-forward, applies everywhere, and is only held back by a lack of resources or an inept government. The reality, or rather, realities, are not straight-forward, and the role of *government* (in its many guises) as a key 'actor' in the 'Aboriginal health saga' is rarely considered closely. Rather, there is a continual focus upon Aboriginal 'behaviour' or 'deprivation' or 'problems'. Governments provide services, training, personnel, infrastructure; people that analyse samples and count heads, people that hand over cheques, people who police health legislation, write guidelines for grant funds, and provide policies and legislation which uphold its principles and attitudes. Governments also have cultures, and histories of ways of thinking about *Aboriginality* which is all vital to this discussion. It would still seem to be the norm for Aboriginal people to be cast in the print and electronic media as *passive victims* in the saga of 'Aboriginal health' not as agents of advocacy and change and certainly not as partners with government in tackling the myriad tasks ahead.

In South Australia, the Aboriginal Health Council took the initiative to develop an Aboriginal health policy in conjunction with Aboriginal agencies, Aboriginal-controlled health services, *and* with the cooperation of the South Australian Health Commission which provides public health services. This has formed part of the Council's Strategic Plan, which has recently been published in draft form. One of its fundamental tenets (and therefore one that must precede any discussion of actual 'case-studies' such as Coober Pedy) is that colonialism has left a messy, bloody and multi-faceted legacy, for example, the removal of children from parents, the economic fragility of communities herded into existence and now reliant on government support due to the dispossession of land, the failure of successive governments to educate Aboriginal people adequately or to pass on managerial skills to community leaders. Hostility is often felt toward anything that smacks of political 'quick-fixism', unnecessary bureaucracy, or the aggressive or judgemental element of police forces (and the wider community from which they are drawn), which has contributed to one of the most intolerable imprisonment rates in the world.

We feel this introduction has been necessary in order to help shatter a prevailing myth that Aboriginal health is basically about 'facts' and 'remedies', medicine, 'hospitals' and 'doctors', and the 'need for this or that to be done 'for' Aboriginal people'. Even an 'environmental health focus' widely misses the mark if considered in isolation from historical (and very contemporary) matters.

This paper argues from a *social health* perspective, that is: the conviction that health is much more than the absence of disease and illness . . . derived from the Ottowa Charter, the National Aboriginal Health Strategy, and so on [WHO 1986; SAHC 1988].[1] It hopes to assist Aboriginal organisations and mainstream health providers to devise a healthy public health policy for Coober Pedy and similar, remote regions (see eg., UPK Report 1987; Hancock 1990). In particular, we canvas the apparent dimensions of the needs presented to Aboriginal Health Workers, together with what they tell us they are doing in response.

[SLIDE 1. MAP]

[SLIDE 2 A. 2B. 2C. TOWN AREA photographs]

Coober Pedy in 'outback' South Australia is home to many hundreds of Aboriginal people either living in the town centre area or nearby Umoona Aboriginal Community. Famous for its stunning opals and tourism, mysterious disappearances, and summer's searing heat which drives people to their underground homes, Coober Pedy has an extraordinary ethnic mix: even in tourist literature it has earned the title of 'a disconcerting town'.

Before we turn to data on health services however, population data presents our first (epistemological) challenge. The 1991 Census data for the District Council of Coober Pedy is immediately striking from an Aboriginal perspective, as 291 people were accounted for on that winter night of June 1991, while there are over 490 people registered in the town health clinic, and there are approximately 100 family names who are regarded as 'locals' by community leaders. As most families are known to be quite large, some with 15 people in one dwelling for example, this figure of 291 is regarded as a gross undercount. Nevertheless, using this 'statistic', the Census recorded that of those over 14 years, 30% were in the workforce, and 11% were registered as unemployed; 70% were at the same address 5 years ago. The latter suggests nearly 1-in-3 lived elsewhere, however only a small number of those were reportedly interstate. Movement between Aboriginal centres or communities in SA is therefore highlighted, which, as any Aboriginal person will tell you, is quite common for community and cultural reasons (see eg., Gale and Wundersitz 1982). Local knowledge confirms a steady traffic between Coober Pedy and Yalata in the States far West, as well as Oodnadatta, Port Augusta, Ceduna in SA, and Finke in the Northern Territory – which has implications not only for record keeping but for health care.

Of those aged 15 or older, 17% left school before the age of 15 and a further 11% did not go to school at all. In other words, 1-in-4 had at most, an education to age 14; while 90% were 'not qualified' and just 3% had qualifications (ie., undergraduate diplomas). Hence Commissioner Dodson's assumption referred to in our opening remarks concerning Aboriginal people being the 'most ill-educated' seems supported by these Coober Pedy figures. Just 10 people, 7 of whom were female, were recorded as attending TAFE for some form of further education at Census time.

On employment, just 18 persons over the age of 15 (11%) were employed full-time - one half of whom were teenagers. None were employers or self-employed. However, and this reminds us of the need to question statistics on Aboriginal issues, 70 people (41%) did not tick *any* boxes on this issue! The reason for this is most likely to lie in the kinds of issues sketched in our introduction such as the fear of government and the past mis-use of research to which many Aboriginal communities have become accustomed. Of the 129 people who replied concerning their annual incomes, 93% were under $20,000, with 67 under $8,000 - way below the 'poverty line'.

A total of 52 dwellings were accounted for in the Census, 13 of which *usually* housed 6 or more people despite having at most, 3 bedrooms. Six of the 52 (11%) were owned or being purchased, while of the 43 rented, 40 were state owned houses.

Seventy-five percent of the 85 females over 15 years of age were single, either never married, divorced or widowed – but the Census Community profiles could not tell us how many of these 62 women were care-givers of children . . . sole parenthood is particularly high amongst Aboriginal people.

[SLIDE 3A, 3B: HEALTH SERVICE FROM OUTSIDE SHOWING PROXIMITY TO HOSPITAL /staff]

Despite the undercount problem then, we can reasonably safely propose many aspects of the demographic profile of this Aboriginal community, such as its considerable economic problems, crowded housing, the relatively few people in employment or further education, and an underlying reluctance on the part of many, to tell authorities of their current circumstances – probably for fear of losing what meagre resources they possess.

We turn now to various health-related data: firstly to deaths data from both, the ABS and Aboriginal Health Workers.

Recent 'Cause of Death' information for Coober Pedy [based on ABS records from 1986 to 1991] showing a high incidence of heart and cerebro-vascular disease, chronic liver disease apparently related to alcohol consumption, and injuries from violence including homicides and suicide, suggests a community under significant stress and facing considerable social difficulties (unpublished ABS data 1993). But the difference between ABS and Aboriginal Health Worker deaths data is marked partly by their respective counts of relevant deaths (that is, 24 versus the health workers' 39 during this period), which highlights the difficulty of defining 'Coober Pedy residents' for such purposes. As Health Worker 'cause of death' data was not derived from medical sources and was frequently accompanied by '?' marks, it has not been compared with the ABS data - but the differences are interesting.

[SLIDE 4: APPROACH TO UMOONA - A DISTANT PHOTO ONLY ILLUSTRATING THE GENERAL ENVIRONMENTAL CONDITIONS]

Health workers by and large understand the communities in which they live and work. They know almost everyone and they are constantly talking to their friends and relations and hearing what is going on. It is noteworthy that of the 39 deaths reported by them: 2 were due to drowning accidents (one reportedly related to an episode of 'heavy drinking' which took place in Port Augusta), 2 to other accidents including a pedestrian hit by a car; 1 to suicide;

and 2 to homicides (both stabbings reportedly related to domestic violence cases: one female and one male victim – both in their 20's). The suicide was also a male in his 20's. Also, of 12 for whom a 'stroke' was suspected, a supplementary cause was listed by health workers as 'chronic alcoholism/heavy drinker'. Clearly such results indicate the grave concern felt about trauma, especially in relation to 'domestic violence' and the overwhelming perception that alcohol is related to much illness and many deaths.

However, death data is notoriously ambiguous the closer one looks (Weeramanthri, D'Abbs, and Mathews 1994). ABS death records 1986-1991 for residents of Coober Pedy revealed the following [see SLIDE 5]

[SLIDE 5]

CAUSE OF DEATH 1986-1991 – ABS RECORDS

CATEGORY	No
ACCIDENTS	3
CEREBROVASCULAR DISEASE	2
CHRONIC LIVER DISEASE & CIRRHOSIS	5
DISEASES OF THE DIGESTIVE SYSTEM	1
HOMICIDE	1
ISCHAEMIC HEART DISEASE	4
NEOPLASMS	2
PERINATAL CONDITION	1
RESPIRATORY-RELATED	5
TOTAL	24

With 5 respiratory-related deaths (including 3 from PNEUMONIA and one from 'TB'), the concern felt by the Umoona Council over respiratory-related conditions is highlighted, but impossible to expand upon without further information, and the role of alcohol abuse and/or violence remains unclear from these figures. It is also important to note that 'Injury & Poisoning' related deaths are apparently not uncommon for Coober Pedy residents generally, as for the years 1990 to 1992 there were 8 such non-Aboriginal deaths compared with 2 for Aboriginal people. Of course such small numbers are statistically meaningless, and due to the disappearances of back-packers in mysterious or violent deaths, or the tragic accidents of tourists walking backwards with cameras in the opal fields, any comparisons are also fraught with difficulty. Clearly, violence is not limited to the Aboriginal community. Coober Pedy can be a dangerous place to live – whoever you are.

[SLIDE 6 - shot of mine shaft or warning sign]

We now turn to illness-related data based upon admissions to Coober Pedy hospital during the period 1988 – 1992. [SLIDE 7] presents the ratio of the number of times it is more likely for an Aboriginal person of the same age and sex, as distinct from a non-Aboriginal person, to be *hospitalised* for the same type of condition *in Coober Pedy (expressed as a standard admissions ratio)*. It is clear that for all of the major categories for which at least 10 Aboriginal people were admitted between 1988 and 1992, at least twice as many admissions of Aboriginal people took place (as non-Aboriginal admissions – after standardisation by age and sex) – and for all but 3 categories, there were more than 5 times as many admissions. But this is only the beginning, as 10 times as many admissions took place for 'MENTAL DISORDERS', nearly 15 times as many for SKIN-related problems, and over 16 times for INFECTIOUS AND PARASITIC DISEASES. Anecdotal evidence suggests that this is more often due to the cyclic re-admission of a small number of individuals rather than a large number of Aboriginal people being admitted – but this is yet to be examined.

This extraordinary degree of hospitalisation is far in excess of that previously published for the State as a whole, but accurately reflects the profile of SA country admissions data for Aboriginal people for 1990 in which 657 Aboriginal people out of every 1,000 were admitted to a hospital, compared with 278 per 1,000 for the total population (SAHC 1993:19).

SLIDE 7

Obviously in the country there are fewer GP's, clinics, community health centres, Aboriginal health services – fewer choices overall - which helps produce such results. In Coober Pedy there is also a pattern of referral to hospital by the Aboriginal Health Workers who often see clients in need of medical attention – for many reasons. It therefore *could* be a good thing (for Aboriginal health) to have such high admission figures for Coober Pedy – it might be that conditions are being treated earlier and better than ever before. Hence, although it is tempting to draw quick conclusions from such results, and it is especially easy to assume from an economic rationalist perspective that such a level of health care is a worry, only further analysis of many other hospitalisation-related matters will improve our understanding – [and this will form part of on-going research by the Council – using Coober Pedy as a case-study of remote health care outside of Aboriginal community control].

So we have begun to appreciate the dimension of the bio-medical ill-health problems and the utilisation of hospital-based health services in Coober Pedy, but this tells us little about health – and what is being done to promote health amongst the Aboriginal communities.

HEALTH WORKERS' WORK

The Aboriginal Health Council of South Australia Inc., an Aboriginal community-controlled organisation responsible for Aboriginal Health policy, research and community health coordination, has for many years stationed 4 Aboriginal Health Workers (AHW's) there. Aboriginal Health Workers have been described as the 'grass-roots operatives' or the 'hub and the backbone' of the Aboriginal Health system. The work of Health Workers is poorly understood by the health professions generally, and anecdotal evidence also suggests this is the case with regard to some Aboriginal communities. Their work helps us to appreciate that: (a) the grim picture is not the only one – much is being done 'on the ground', every day of every week, by Aboriginal people or organisations, for and with other Aboriginal people, to address the most serious presenting health needs, and, (b) much more *must* be done *outside of the health system itself* – both within government and Aboriginal communities, to address the short and long-term well-being of such communities.

The Council's new *Aboriginal Community Health Information System*, (a modified computer-based community health information system developed for South Australia's community health centres), allows Health Workers to describe many aspects of their work in some detail for the first time. The principal reasons for individual or family– client contact with health workers (who are located in air-conditioned huts nearby the Coober Pedy hospital) were as follows [PIE CHART - SLIDE 8]

SLIDE 8

There were 1,832 attendances for 296 clients over the previous 7 months (from October 1993 until April this year) since this record keeping began.

This pie chart shows that 40% of all Aboriginal client attendances at the Coober Pedy health service were for health check-ups, screenings, immunisations, seeking advice or assistance in relation to health problems of relations, and so on, rather than for a particular medical problem. 'Social problems' of various kinds, from unemployment-to-housing to-'domestic violence' – were the principal reasons for further 11% of visits to the service. Interestingly, 'laceration/puncture wounds' were common, with 78 attendances for 44 people while (and this is probably related), 21 clients presented for 'domestic violence' issues over 33 attendances. Mental/psychological/behavioural problems accounted for a further 10% – the latter, principally for alcohol-related problems. Various skin problems (5%) and injuries & poisoning (6%) accounted for another 11%, leaving 30% for the other categories.

Looking closer at these results, SLIDE 9 shows the kinds of issues for which clients were most likely to *return* to health workers for more than one visit.

SLIDE 9

'Antenatal Care' (over 5.5 visits per client on average) followed by heart-related problems and skin problems (both approximately 4.5 visits per client) followed closely by alcohol-related problems, diabetes Type 1 and Post Natal Care. It is clearly also significant that financial problems, domestic violence, and wounds together with appointment reminders feature in this list of issues for which people return the most times.

Overall, it would appear encouraging that assistance is being sought for these types of issues – many of which do not result in medical attention, rather more often the matters are discussed and health workers and clients learn from each other as the Aboriginal community works to address its own problems in its own way. As such discussions are often family ones (which is clear from the extra 1,000 attendances also recorded by Health Workers during the one-to-one sessions with those registered clients discussed above), the learning extends well beyond the more typical 1:1 client-contact model of Western health care. A further 405 attendances took place with persons not registered – which were mostly brief, one-off visits.

As client referrals are frequently made to hospital, it is important to realise that this particular Aboriginal Health service offers a complimentary *approach to that of* Western health care (with its bio-medical focus). The hospital is also visited by Health Workers.

In addition, from time to time, traditional Aboriginal health practitioners are utilised, either by transporting clients to the Nganampa Health Service in the AP lands in the far north-west of the State, or by bringing one in to Coober Pedy to treat them there. Health workers therefore liaise also between the client and the traditional health providers, as well as the hospital – thus illustrating their vital, but poorly appreciated, brokerage role.

But the work of these health workers is not confined to individualistic client care, as routinely, they keep in touch with wider Aboriginal community life for example, through attendance at *funerals*), and, they conduct PROGRAMS for groups of people, eg., for the following [SLIDE 10].

SLIDE 10

- Aged care/health
- Asthma
- Child Health
- Diabetes & Hypertension
- Disability Assessm't needs
- Domestic Violence W/shop
- Drug & Alcohol Discussion/Substance Abuse
- Emotional Health- Self Esteem
- Headlice
- Health Promotion & Education
- Meals
- Physiotherapy/Sports
- School Health Check
- School health class
- Senior girls - Sexuality
- Sexuality - general group
- Sexuality : Self Esteem & Sexuality (school)
- Women's health

In addition, intersectoral collaboration involving these Health Workers by way of support or liaison with other agencies, related to the following [SLIDE 11].

SLIDE 11

- AHC: Policy & Planning
- Anti Poverty / community development (FACS)
- CAFHS – Child Development & immunisation
- Chest Clinic X Ray
- Child Care Centre
- Child health / Child Protection panel
- Community Development: Future Planning
- Ears Nose & Throat specialist clinic
- Eye health – trachoma
- Eye Health / trachoma clinic
- Family Planning / cervical screening
- Family Well-being
- HIV AIDS Education: school Program Planning
- HIV/AIDS National conference
- Interpreter Language Course
- Meals on Wheels
- Paediatrician
- Respiratory health – TB Screening
  – Asthma
- Rural Advisory Committee tele-conference
- School Education
- Substance Abuse Committee
- Women's Health – Cervical Screening

So you can also see how critical Health Workers are to wider aspects of the implementation of primary health care or social health philosophy, in the health system and beyond.

We interviewed the Co-ordinator of the AHW's (the only non-Aboriginal of the team of 4 – a registered nurse who has worked in Coober Pedy for 17 years) – to invite her opinion about 'what has made a difference?' After consulting the health workers, she commented that family planning, cervical cancer screening, general compliance with health worker suggestions, sores, and eye problems . . . all had improved. However, ear problems and skin sores remained a constant concern as did the effects of alcohol and other drugs on the health of Aboriginal people as a whole – especially on infants and even upon the unborn. They also commented on the reluctance of teenagers to seek health advice or attention. She felt hygiene-related concerns such as scabies and sores directly reflected poor quality housing, overcrowding, and other environmental health matters such as the cost of water, dog health, and so on – and the need for further health education amongst the community – to which we will return later.

We asked these health workers how they felt they were managing the constant demand for health services and if they felt resources were adequate? 'Yes generally' came the reply - apart from the lack of basic office equipment (a fax and copier) - which necessitated frequent time-wasting trips to the hospital.

Their *vision* for the Aboriginal community of Coober Pedy is for more jobs, more housing of a good quality, less violence and substance abuse, better coordination and cooperation between the Aboriginal community generally and the wider community, and a more united approach from within the Aboriginal communities which could better motivate families to take responsibility for their own health *as much they are able*.

Looking beyond the work of health workers, other services within Coober Pedy currently operate in these fields which are also directly concerned with Aboriginal well-being [SLIDE 12].

SLIDE 12

WIDER PROGRAMS OPERATING IN COOBER PEDY

AGED CARE
CDEP – EMPLOYMENT [UNDER DISCUSSION]
CHILD CARE
CRIME PREVENTION
FAMILY CARE
HOMEMAKERS PROGRAM
HOUSING
YOUTH PROGRAM

There is also a Coober Pedy Community Development Committee. It is surprising that programs are not currently operating in the fields of either *Substance Abuse or Domestic Violence* – ones that everyone knows can be inter-related and which are again a major source of concern in the town - although there has apparently been funding approval for Domestic Violence services.

A recent Child Health workshop highlighted the need for the Community to: [SLIDE 13]

SLIDE 13

CHILD HEALTH WORKSHOP

- TAKE GREATER RESPONSIBILITY FOR CHILDREN'S CARE
- REGARD THEM AS THE FUTURE AND EXPRESS PRIDE IN THEM
- NOT EXPECT TOO MUCH OF AGENCIES OR HEALTH WORKERS, AND TO CONTROL ALCOHOL-RELATED PROBLEMS AMONGST ADULTS SO AS NOT TO NEGATIVELY AFFECT THE KIDS

... which again highlighted the problem of substance use in the region.

In addition, the workshop raised the lack of 'communication, consultation, and coordination' between services and parents/community leaders, and lack of self-esteem amongst parents was listed as a *source* of many problems leading to substance abuse and poor parenting. This in turn, was linked to lack of education, and the lack of *empowerment* in the Community. *Two pages of strategies were recommended to begin to deal with this including the need for reconciliation programs to promote Aboriginal/non-Aboriginal respect and understanding, recreational/drop-in facilities particularly for the youth and parents, and for training/skills-building in community decision-making and "making things happen"*

Similar workshops have been held on Aged Care and Youth Issues, which raised many matters of a similar kind – and which are being followed up at present by AHC Health Workers. The need for better resources and more staff for care of the elderly has been stressed in conversations with Health Workers.

In conclusion, Aboriginal health in Coober Pedy is only simplistically 'encapsulated' by data about illness, death, or even what programs are running where. It is a dynamic town and community, with much traffic to and from the Ceduna/Yalata communities, and even the Port Augusta region. Aboriginal leaders who have lived in the town for many years have said that '*they understand how whitefellas get disillusioned*' ... it is a town with big problems, big environmental obstacles, and not so big resources.

The obvious source of employment in the town which is tourism is not at present being 'tapped' in any significant way by the Aboriginal community (for a host of reasons that require a separate project to explore), and financial difficulty is commonplace ... We should also remember this is a town where just to have water in your household can cost up to $240 a month – that's nearly $3,000 a year! – and where isolation, lack of support and community infrastructure minimises the likelihood of continuity amongst professionals – which means some services are still very thin on the ground while others remain non-existent. Dogs are thought to continue to be a major problem despite attempts to deal with them by the Umoona Council. The *dust* is often a precipitating factor in respiratory conditions. *Hearing* problems are reported to be widespread but this is another area for which systematic research has seemingly never taken place. *Food* quality is often reported to be poor, with insufficient variety – and of course it too is quite expensive relative to other less remote locations. Local publicans profit handsomely from the over-indulgence of *alcohol* by some Aboriginal people which has prompted other shop-owners to suggest the 'solution' to the 'problem' of Aboriginal drinkers in the town centre is to 'take them back to Umoona' ... thus indicating a racist element in the town.

It has not been possible in the time available to receive direct input to this discussion paper from members of the Umoona Aboriginal Community Inc. – who are considering this paper for their own purposes. Other matters would need to be canvassed in a comprehensive account of public health in this remote 'outback' region, such as the quality of care provided at the Coober Pedy Hospital, the hospitalisation of residents in Adelaide rather than in Coober Pedy (about which, data is being pursued at present), the relationship between traditional culture and health in the region, and an evaluation of other government services stationed there and the policies under which they operate. There is clearly much scope for further dialogue and action in the face of the considerable challenges this unique place presents.

We have seen evidence of some level of intersectoral collaboration in Coober Pedy but from the perspective of this organisation, what still seems to be lacking is action that can be clearly seen to be flowing from strong government commitment to Aboriginal health policy in the wake of the National Aboriginal Health Strategy (NAHSWP 1989). That is, there is no clear model of partnership and collaboration with Aboriginal organisations 'on the ground' – ones which are regarded as those in control of their people's well-being. Neither is there a vision for the reform of 'mainstream' service provision to Aboriginal people. These are precisely what the Council's own Strategic Plan and Aboriginal Health Policy aims to promote. This 'double-edged sword' approach assumes that responsibility must be taken on *both* 'sides' of this cultural arena – with the principal onus remaining with the State.

Two things have therefore been argued: firstly, that the daily activities of Aboriginal people and organisations chipping away at the monumental iceberg of disadvantage and oppression— in the wake of the failures of the colonial state to address their needs and recognise their right to self-determination over many generations – should command greater recognition and respect from other health professionals and the media alike – rather than the endless saga of the 'negatives' in isolation. Indeed, it is clear that considerable effort is exerted daily in very difficult social circumstances and work environments. Following this, Aboriginal organisations also should be given the right to make mistakes ...

And secondly, that poor housing and unemployment in particular are *fundamentally unhealthy social realities* which greatly increase the likelihood of substance abuse and crime which further undermines a community's capacity to respond to its multiple needs. While alcohol-focussed services would appear to again be needed after having been shut down in the late 1980's, they must not be provided in isolation from jobs and adequate shelter.

A planned, consultative, and systematic approach is therefore vital to the future of this community, else the kinds of bio-medical profiles we have canvassed today will persist. Things have changed in the decade which has passed since *The Report of the Committee of Review of Aboriginal Health in South Australia* (Foley 1984). Aboriginal organisations are working for the good of their own people – but they are continually hampered by forces beyond their control, besides the harsh climate of the region.

With regard to services currently not being provided but for which monies have been allocated, it would seem we do not fully understand why for example, Coober Pedy remains bereft of adequate services for those afflicted by 'domestic violence' – which together with substance abuse related problems, appears to be having a major toll on the community including its health and welfare workers.

In terms of future research, there is a clear need to move well beyond the usual statistical overviews common in Aboriginal health accounts, to explore particular socio-cultural ethnographic perspectives, but the gate has shut on traditional anthropological methods which for decades managed to ignore consideration of the actions and policies of the state, and which have contributed to research becoming a dirty word in many Aboriginal communities because they ignored fundamental issues of justice. Only politically astute, ethnographic research can begin to unravel questions such as why available resources are not utilised (if indeed they are available), why so few people are doing further education courses, whether the treatment of hospitalised Aboriginal people is appropriate, or which services or programs run by health workers are meeting their goals. Such qualitative research is still remarkably absent in this vital policy arena in Australia.

Finally then, it must be asserted that much is going on in response to many needs in the Coober Pedy region – by Aboriginal people and for Aboriginal people in particular – but many important questions remain before an adequate regional healthy public policy can be constructed based upon maximum Aboriginal input. The Aboriginal Health Council, having taken the initiative to facilitate South Australia's draft Strategic Plan and Aboriginal Health Policy looks forward to constructive discussion over its recommendations (as it does also to evidence of commitment to it by mainstream services). It is hoped that research such as this, focussing on the complexities of health care in Coober Pedy, has contributed to this process – in particular by highlighting the danger of simple solutions to complex problems, and of failing to recognise the vital role of Aboriginal health workers in the implementation of primary health care principles.

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The SA Health Commission has been noted for its progressive Social Health Policy [SAHC 1988] which continues to guide the implementation of various primary health care approaches to health in our State.

IDENTIFYING HEALTH NEEDS IN RURAL COMMUNITIES

Rosalind Welch – Australia

ABSTRACT

This study was designed to develop a quick methodology to identify the health care needs of a rural community and to determine what factors make these communities "happy" or "unhappy" with respect to medical service provision.

Two rural towns of approximately 4,000 people were chosen from different health regions of Western Australia. These two towns were comparable in terms of their population and the types of health and medical services currently available.

The methodology consisted of interviews with health care providers and key community informants as well as a community questionnaire. This questionnaire was administered in one of the following three ways: by post, hand delivered or filled out by the researcher and respondent together.

The results of the study showed that hand delivery of the community questionnaire yielded the highest response rate while also being the least expensive methodology option. The interviewing process showed that key community informants offered no new information in addition to that already provided by the health care providers. Furthermore, all key points would have been covered by interviewing approximately 60% of all health care providers in each community.

Both towns indicated problems with aspects of their health care not uncommon to other rural towns. Access to female GP services, mental health services and services for the aged were perceived to be inadequate for both towns to varying degrees. In both towns, priority was placed on curative rather than preventive services. There were significant differences between the two towns in their level of satisfaction with GP and hospital services, in particular after hours access and the ability to get an appointment quickly. The majority of respondents in both towns did agree that the standard of GP care was good and that the GPs were concerned and compassionate.

Above all other health services (including preventive services), the GP and the hospital are rated as the most important services for the health and wellbeing of the community. The level of satisfaction with GP and hospital services determines whether a community is medically "happy" or "unhappy".

PROJECT OUTLINE

This research project has been developed by the Department of General Practice in conjunction with WACRRM (The Western Australian Centre for Remote and Rural Medicine) at The University of Western Australia.

There were three main objectives of this project:

1. To develop a quick methodology to identify health care needs and manpower problems of a rural town.
2. To empower rural communities to initiate interventions aimed at solving their health care problems.
3. To determine what factors make rural communities "happy" or "unhappy" with respect to medical service provision.

The project has been funded by both RHSET (Rural Health Support, Education and Training scheme) and the Health Department of Western Australia through the Productivity Improvement Program.

Two rural towns of approximately 4,000 people each were chosen for this project. One in the Central Wheatbelt (Town 'A') and the other in the Great Southern region (Town 'B'). These towns were chosen because they have a similar population and comparable health services.

METHODOLOGY

The research methodology was designed to test various methods of identifying health care needs in a rural community. The project commenced in January 1993 and field work in the two towns was undertaken in July and August. The project, including the community feedback phase, is due for completion in July 1994.

1. Community Questionnaire

The questionnaire consisted of around 30 questions. Some were open-ended questions that required respondents to give opinions and comments eg. *what do you think are the main problems in health care facing your community*. The majority of questions however required respondents to give a rating on a scale of 1 to 5 or to agree or disagree with given statements. Three questions asked the respondent to give details of their household and its health problems. Many of the questions related to rating satisfaction with existing health services and suggestions for improvement.

This questionnaire was administered by 1 of 3 methods:

1. *Postal* – Questionnaires were sent to an individual from a randomly picked household from the Electoral Roll including a Reply paid envelope. They were sent to equal numbers of males and females. This method was used to survey residents who lived outside the town centre. 20% of this population was sent a questionnaire.

2. *Hand delivery method* – In this case the questionnaire and a reply paid envelope were personally delivered by research assistants who were well known in their respective towns. An attempt was made to balance here for gender. This method was used to survey residents who lived within the town itself and every 5th house was approached.
3. *Seniors group* – In this case the questionnaire was completed by the respondent and the researcher together. Both Town 'A' and Town 'B' have Senior citizens centres run by Home & Community Care where senior citizens meet for meals and activities. With the assistance of these HACC co-ordinators, senior citizens were approached and asked to complete a questionnaire.

In Town 'A', questionnaires were also left at the front counter of the hospital reception area for any interested individuals to take, however this only resulted in 5 additional questionnaires being returned.

Prior to our arrival in each town an article was published in the local paper outlining the research project and asking for co-operation from community members. Local health and Shire personnel were also contacted in advance.

The response rates to the community questionnaire are shown in Box 1.

Box 1: Response rates, Town 'A' and Town 'B'

TOWN 'A'	TOWN 'B'
73% (Response rate of questionnaire)	68% (Response rate of questionnaire)
248 HOUSEHOLDS - 19% OF TOTAL NUMBER OF HOUSEHOLDS IN SHIRE	226 HOUSEHOLDS - 17% OF TOTAL NUMBER OF HOUSEHOLDS IN SHIRE

The age structure of both samples obtained through the questionnaire was representative of the actual population when compared to 1991 Census data (see Figures 1 and 2).

Figure 1: Age structure of total sample and Census 1991, Town 'A'

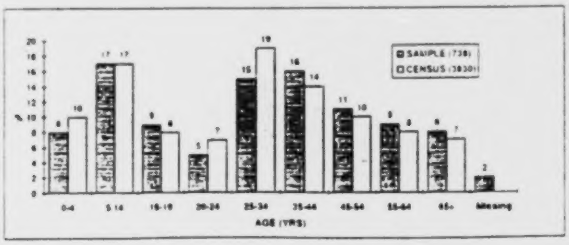
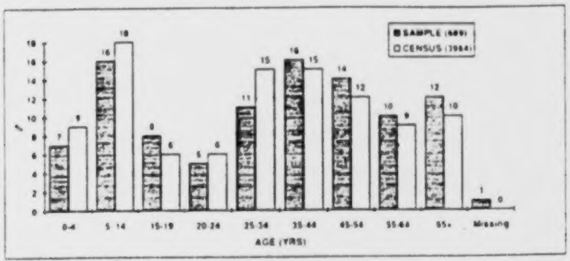


Figure 2: Age structure of total sample and Census 1991, Town 'B'



In both towns, the hand delivery group achieved a better response rate than the postal group, in the order of 7% higher for both towns. The postal response rates for Town 'A' and Town 'B' were 69% and 63% respectively. The hand delivery response rates for Town 'A' and Town 'B' were 76% and 70% respectively. The higher overall response rate in Town 'A' could be explained by the high media coverage we received through local radio.

The questionnaire was a methodology technique directed specifically at community members. A different methodology was employed to gather information from health care providers and other key community informants. This took the form of an interview.

2. Interviews

These interviews were designed to be loosely structured and consisted of 10 questions or discussion headings. Topics for discussion included the interviewees perception of the hospital, the GPs and other health services. Interviewees were also given the opportunity to make suggestions on any changes they would like to see to health care in their community.

Interviews were conducted on a one-to-one basis with all available health care providers in each town. These included the GPs, DON, Community health and other allied health personnel. (Town 'A' = 19 and Town 'B' = 22)

As well as health care providers we interviewed as many key community informants as possible. These interviews were also conducted on a one-to-one basis. Individuals in this group included the Shire president, a representative from the CWA, the high school principal and members of sporting clubs and other community organisations. (Town 'A' and Town 'B' = 16)

RESULTS

There were significant differences documented between Town 'A' and Town 'B' with regard to satisfaction with health care services in the town. A selection of results which best illustrate these differences is presented in this paper.

Overall satisfaction with GP services

Respondents to the community questionnaire were required to rate specific aspects of their GP's care, for example, the ability to get an appointment quickly and availability after hours. Table 1 illustrates how respondents rated overall GP care.

Table 1

RATE OVERALL GP CARE	TOWN 'A' (n=221)	TOWN 'B' (n=194)
	% (n)	% (n)
EXCELLENT TO V GOOD	47(103)	90 (174)
GOOD	39 (84)	9 (17)
FAIR TO POOR	14 (30)	1 (1)
TOTAL	100% (217)	100% (192)
	Missing=4	Missing=2

There was a significant difference between the two towns and the rating of overall GP care ($p < 0.01$). Significantly more respondents in Town 'B' rated their GP's care as excellent to very good than in Town 'A'.

Overall satisfaction with Hospital services

Respondents to the community questionnaire were required to rate particular aspects of their local hospital's care such as the nursing care, emergency care and specialist services. Table 2 shows how respondents rated overall hospital care in the two towns.

Table 2

RATE OVERALL HOSPITAL CARE	TOWN 'A' (n=248)	TOWN 'B' (n=226)
	% (n)	% (n)
EXCELLENT TO V GOOD	59 (127)	83 (165)
GOOD	25 (53)	15 (30)
FAIR TO POOR	16 (34)	2 (4)
TOTAL	100% (214)	100% (199)
	Missing=34	Missing=27

There was a significant difference between the two towns and the rating of overall hospital care ($p < 0.01$). Significantly more respondents in Town 'A' rated overall hospital care as fair to poor, in the order of eight times as many as Town 'B'.

Importance given to hospital remaining open

As part of the community questionnaire, respondents were asked *"How important do you feel it is that your hospital remain open within the community?"* In both towns, over 95% of respondents indicated that it was 'very important' for the hospital to remain open (see Table 3). The hospital, along with the GP, was rated as the most important part of the health care system.

Table 3

KEEP HOSPITAL OPEN	TOWN 'A' (n=248)	TOWN 'B' (n=226)
	% (n)	% (n)
VERY IMPORTANT	97 (239)	99 (221)
SOMEWHAT IMPORTANT	2 (5)	1 (3)
NOT IMPORTANT	1 (1)	
TOTAL	100% (245)	100% (224)
	Missing = 3	Missing = 2

There were a variety of reasons given as to why the hospital should remain open. Of primary importance was the proximity of the local hospital to the community.

In particular, respondents felt it was:

- too far to travel to other hospitals
- it was important to keep patients close to home and family
- and it was important for convenience and accessibility

Other reasons included:

- both hospitals have large catchment areas
- the communities felt it was essential, even a basic right, to have access to emergency services locally

Health care delivery issues

The community questionnaire asked respondents in each town to rate whether particular health care issues were a problem for their community. They could be rated as a serious problem, a mild problem or not a problem. There were significant differences between Town 'A' and Town 'B' in the ratings of these health care delivery issues ($p < 0.01$, see Table 4).

Table 4

HEALTH CARE DELIVERY ISSUE	TOWN 'A' (n=248) serious	mild	no problem	TOWN 'B' (n=226) serious	mild	no problem
		%			%	
1. Too few GPs or services	28	49	23	2	12	86
2. Too far to travel to get good care	23	34	43	3	16	81
3. Care is too expensive	26	33	41	9	22	69
4. Access to emergency care is poor	14	35	51	2	10	88
5. It takes too long to get an appointment	13	41	46	1	21	78
6. Some nurses are of low quality	6	23	71	1	16	83
7. Limited access to female GP	29	41	30	6	38	56
8. Lack of alternative medicine	17	33	50	11	56	33

For two of these health issues there were outstanding differences between the two towns. Firstly, the issue of the number of GPs was of particular concern for Town 'A' respondents. A total of 77% of respondents in Town 'A' indicated that this issue was a mild to serious problem while in Town 'B' this figure was only 14%.

Secondly, access to female GP services. The number of people who thought access to a female GP was a serious problem in Town 'A' was over four times greater than the number of people in Town 'B'. Part-time female GP services had recently become available in Town 'A' at the time the questionnaire was circulated. Many respondents indicated that as yet they were unaware of the female GP service. The issue of access might be expected to improve as people become aware of this service.

Destination for health care needs

Respondents to the questionnaire were also asked to indicate where any member of their household would go for a variety of health care needs (see Tables 5-8). Respondents could reply 'not applicable' if the health care scenario did not apply to them.

Acutely ill child

Table 5

DESTINATION	TOWN 'A' (n=248)	TOWN 'B' (n=226)
	% (n)	% (n)
LOCAL	69 (123)	80 (137)
REGIONAL CENTRE	—	8 (13)
PERTH	30 (53)	12 (21)
OTHER	1 (3)	—
TOTAL	100% (179)	100% (171)
	N/A = 44 Missing = 25	N/A = 36 Missing = 19

In both towns the majority prefer to use local services first. Town 'B' respondents were more likely to utilise their regional centre than Town 'A'. Town 'A' respondents seem to rely more heavily on Perth as a destination. There are two Paediatric specialists that visit the regional centres of both Town 'A' and Town 'B' but this does not seem to alter the decision of Town 'A' respondents to go directly to Perth.

Delivery of a baby

Table 6

DESTINATION	TOWN 'A' (n=248)	TOWN 'B' (n=226)
	% (n)	% (n)
LOCAL	79 (150)	87 (150)
REGIONAL CENTRE	1 (1)	6 (10)
PERTH	17 (33)	6 (10)
OTHER	3 (5)	1 (1)
TOTAL	100% (189)	100% (171)
	N/A = 37 Missing = 22	N/A = 39 Missing = 16

In both towns, the majority use local services first. Town 'A' respondents are more likely to use Perth than their regional centre. Town 'B' respondents utilise Perth and the regional services equally. There is a resident Obstetrician in the regional centre of Town 'B' and a visiting Obstetrician to Town 'A'. However, visiting specialist services are not accessible in an emergency situation. This could explain why, in the case of delivery of a baby, respondents indicate Perth as a preferred destination to the regional centre.

Mental health counselling

Table 7

DESTINATION	TOWN 'A' (n=248)	TOWN 'B' (n=226)
	% (n)	% (n)
LOCAL	27 (40)	41 (53)
REGIONAL CENTRE	3 (5)	35 (46)
PERTH	70 (103)	24 (31)
OTHER	—	—
TOTAL	100% (148)	100% (130)
	N/A = 64 Missing = 36	N/A = 64 Missing = 32

In Town 'B' almost equal number of respondents would use local or regional services for this health care need. In Town 'A' the outstanding majority of respondents would go straight to Perth and bypass the regional centre. There is one part-time resident Psychiatrist in the regional centre of Town 'B'. There is one regularly visiting Psychiatrist to the regional centre of Town 'A' although it was reported that this service is not readily accessible to Town 'A' residents. Both towns have some visiting social worker and counselling services and some access to Psychiatric nursing services.

Women's health care

Table 8

DESTINATION	TOWN 'A' (n=248) % (n)	TOWN 'B' (n=226) % (n)
LOCAL	84 (186)	85 (178)
REGIONAL CENTRE	—	13 (27)
PERTH	14 (32)2 (4)	
OTHER	2 (4)	—
TOTAL	100% (222)	100% (209)
	N/A = 13 Missing = 13	N/A = 6 Missing = 11

Local services are used more frequently than other locations. Once again it can be seen that Town 'B' respondents utilise and rely on their regional centre, while Town 'A' respondents rely more heavily on Perth facilities. In all cases outlined in Tables 5-8, there was a significant difference between the two towns ($p < 0.01$).

It is interesting to note that Town 'A' is actually closer to Perth , by road, than Town 'B' by approximately 100 kilometres. This might explain the higher degree to which Town 'A' respondents utilise Perth services. However, it does not explain the reluctance, in all these health care scenarios, to utilise the regional centre which is actually en route to Perth.

Changes to health care

A question that was common to both the community questionnaire and the interviews centred on changes that respondents would like to make to health care in their community. Table 9 illustrates some of the suggested changes made by respondents to the questionnaire in both towns.

Table 9

TOWN 'A' (top 5 changes given)		TOWN 'B' (top 5 changes given)	
1 GPs	(43%)	1 No changes needed	(32%)
2 Hospital	(21%)	2 Allied health services	(20%)
3 Specialist services	(20%)	3 Specialist services	(19%)
4 No changes needed	(14%)	4 GPs	(12%)
5 Allied health services	(13%)	5 Aged care	(10%)

NB: Percentages do not add to 100% as respondents could make multiple responses.

TOWN 'A'

In Town 'A', respondents made suggestions on GP services more than any other aspect of their health care system. The hospital and specialist services were also mentioned frequently.

To give more detail on these suggested changes:

- GPs — Increase number of GPs, improve after hours access.
- Hospital — Town 'A' should have the regional hospital, more staff required especially in the outpatients and X-ray departments after hours.
- Specialist services — Increase number of specialist visits / access.
- Allied health services — Additional Chemist required / longer hours on weekends; more professional counselling services; improve Silver Chain service.

TOWN 'B'

Town 'B' respondents indicated more than anything else that they were satisfied with current health care and required no changes to be made. Their suggestions for change centred around allied health and specialist services.

To give more detail on these suggested changes:

- Allied health services – Upgrade Dental facility; additional Chemist / longer hours; Hydrotherapy pool.
- Specialist services — Increase number of visiting specialists.
- GPs – After hours availability.
- Aged care – Aged accommodation and nursing home facilities.

DISCUSSION

Methodology Review

The most effective method for questionnaire distribution was hand delivery by local people to approximately 15-20% of the shire's population. Not only did the hand delivery method achieve the highest response rate for return of the questionnaire but it was also administered at the lowest cost. More importantly however was the fact that the information given in the questionnaires by the hand delivery group was not significantly different from that given by the postal group. The seniors group did not offer any new information. If the objective of the methodology is to be "quick" than the hand delivery method appears to be most appropriate.

In assessing the interviews with health care providers and key community informants it was found that the key community informants did not offer any new key information that was not supplied by the health care providers. Anecdotal information is always useful and interesting but if the methodology is to be "quick" then the results of this study indicate that it is not necessary to interview any key community informants. For credibility within the community it is appropriate for some to be interviewed, in particular the Shire president, the high school principal and a representative from the CWA. It was also not necessary to interview all the health care providers. The key health issues for each community were covered by interviewing approximately 60% of the health care providers.

GP Services

In both towns, important priority is placed on curative rather than preventive services. In particular the GP is rated as the most important part of the health care system. This supports the findings of Humphreys and Weinard (1991). Satisfaction with GP services is central to whether a town is "happy" or "unhappy" with its medical services.

The differences between Town 'A' and Town 'B' were significant and well defined. Although the same proportion in each town stated they have a current personal GP (>90%), there were significant differences in the way respondents rated aspects of their GP's care. There were significant differences between particular aspects of care, especially after hours access and the ability to get an appointment quickly. Although the majority in both towns agreed that the standard of GP care was good and that the GPs were concerned and compassionate, these ratings were significantly higher in Town 'B'. Town 'B' respondents stated it was easier to get an appointment quickly and there was greater access after hours. Respondents in Town 'B' rated overall GP care significantly more favourably than in Town 'A'.

Although most respondents (>90% in both towns) indicated their personal GP was local there were differences in the reasons given for the use of a non-local GP. In Town 'A' the important reasons included concerns regarding privacy and confidentiality as well as the search for a better quality service. In Town 'B' the use of a non-local GP centred on proximity to work and shopping.

There was significantly more concern over the number of doctors in Town 'A'. This is a topical issue with many people indicating the need for a third full-time doctor in the town. This is not an issue for Town 'B' which presently has 3.5 GPs. The health care providers and key community informants that were interviewed indicated that the current number of GPs was adequate and they also emphasised that the GPs co-operate together, are dedicated, respected and involved in the community.

The perceived lack of GPs in Town 'A' is part of the overall dissatisfaction that respondents in this town have with GP services. However, approximately half of the health care providers and key community informants that were interviewed indicated that the current number of doctors was adequate. However, it was reiterated through these interviews that weekend coverage by the GPs was problematical and that there was poor communication between the doctors.

Women's Health Services

Access to female GP services is a significantly greater problem for Town 'A' respondents than Town 'B' respondents. Currently there is one female GP who visits Town 'B' from the regional centre and one part-time female GP in Town 'A' (at the time of this report). Many residents in Town 'A' were unaware of this service or were experiencing difficulty in accessing this service. Respondents to the questionnaire indicated that local services are preferred for women's health care (84%) in Town 'A', but if non-local services were used there was a greater tendency to use Perth-based services in favour of regional centre services. In Town 'B' local services were used for women's health (85%). Inadequacies in women's health appeared to be less outstanding for Town 'B', although other reports have documented a general lack of women's health services and access to adequate information for women in the Great Southern health region (CSIRO / Curtin Centre for Applied Psychology 1992). There was greater use of regional services by Town 'B' respondents.

HOSPITAL SERVICES

Hospitals, along with GPs, are rated as the most important curative services by respondents in both towns. Town 'B' respondents were significantly more satisfied with overall hospital care. There were 16% of respondents in Town 'A' who rated overall hospital care as fair to poor compared with only 2% in Town 'B'. Similarly, nursing care, staff concern and compassion and comfort were all rated significantly higher by Town 'B' respondents. The unhappiness with medical services in a town appears not to be restricted to the satisfaction with GP services but is also closely integrated with the satisfaction with hospital services. This is not surprising as the GP and the hospital are both rated as important services for a community's health and wellbeing.

The importance of the local hospital is further supported by the majority of respondents who feel it is very important to keep the local hospital open. The issue of proximity is of importance as respondents stated that if their local hospital were to close it would be too far to travel to the next one. In both towns the hospital services a large catchment area and this was another reason given as to why it should remain open.

Information obtained through interviews with health care providers and key community informants reiterated concerns that were expressed through the questionnaires but with more detail. The hospital in Town 'A' was perceived as having a good reputation and recent improvements to services have improved the hospital's image. There were perceived problems with the under utilisation of SHLS (State Health Laboratory Services) and access to after hours X-ray services. Interviewees perceived that some of the community were critical of the hospital and this view was supported by the ratings of hospital services in the community questionnaire.

In Town 'B' the hospital was highly regarded and seen as friendly and personal. Some allied health services, for example Occupational therapy and Speech therapy were considered to be less than adequate and some interviewees expressed a wish for more surgery to be performed in the hospital.

The interviews provided more detail on each hospital than the community questionnaire by mentioning specific problems and issues. Overall judgements and ratings of hospital services were measured by the questionnaire. The differences between the two towns illustrate the higher level of satisfaction in Town 'B' and the importance of hospital services in the felt "happiness" with medical service provision.

Emergency care

There were significant differences between the two towns in their perceived access to emergency care. In Town 'A', 49% found access to emergency care as a mild to serious problem compared to 12% in Town 'B'. There were also significant differences in the ratings of emergency care at the hospital. In Town 'A' 30% of respondents rated this as fair to poor whereas in Town 'B' this figure was only 4%. The majority of respondents in both towns indicated that it was "very important" to keep the local hospital open and emergency access was given as an important reason why, along with proximity and catchment area issues.

Ambulance services were rated as high quality by both communities but more so in Town 'B'. There were very few respondents who made negative comments regarding ambulance services in either town. Across all interviews with health care providers and key community informants, the general consensus was that the ambulance service was highly regarded and the Royal Flying Doctor Service was seen as responsive and well utilised.

Mental Health Services

Access to mental health services was a problem verbalised by interviewees in both Town 'A' and Town 'B'. There was particular dissatisfaction with services in Town 'A' and respondents commented that there was a lack of services for this health care need. This supports other research into this particular topic (Lewin, Hobbs, Straton & Sweeney 1992) which found that the main criticism of current mental health services for the Central Wheatbelt region "was simply that services did not exist." GPs in the Central Wheatbelt have expressed a need for more Psychiatric specialist services as currently there is only one visiting Psychiatrist to the regional centre (Welch, Kamien & Jackson 1992). Many respondents in Town 'A' commented that this service was very difficult to access. Consequently, Town 'A' residents tend to bypass the regional centre in favour of Perth, in fact 70% of respondents indicated that Perth was the preferred destination for mental health counselling.

Town 'B' respondents were significantly more likely to utilise local services first for this health care need (41%) and the regional centre was preferred to Perth as a second destination. There is a need for more counselling services especially grief counselling and this was expressed by both providers and consumers. GPs in the Great Southern region have in the past expressed a need for more Psychiatric support both in the form of a Psychiatry and Psychology services (Welch et al 1992). There is a resident Psychiatrist in the regional centre as well as visiting specialists to this centre. Mental health services have been documented as an unmet health need in other parts of this health region as well (Health Department of Western Australia 1993).

COMMUNITY EMPOWERMENT

This research project has documented detailed information on the opinions and perceptions of a sample of community members in two rural towns. A key objective of this project is to feedback this data to the community. The community will then be in a position to implement any changes, based on factual data collected by an outside institution. Community leaders will be aware of perceived community dissatisfaction and areas in which change is needed.

Feeding back the documentation contained within this report is one of the key objectives of this project. Feedback will occur to each community in the form of a presentation of this report and discussion of results. The community will then be given ample opportunity to submit comments on the report and its findings. The final stage of the project will involve evaluation of the feedback process which is to be completed in July 1994. This will form the basis of an additional report.

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SKILLS AND REQUIREMENTS OF RURAL HUMAN SERVICE ORGANISATIONS.

Marise Sacco — Australia

The selection and retention of staff is of concern to all rural health service providers. The present study involved interviews (n=25) and survey data (n=60) to obtain a profile of human service providers. Interviews revealed that a number of strategies have been developed to offer support to workers. Lack of access to supervision and networks are factors which contribute to the low retention rate of rural human service workers. Life—style factors in rural communities are important reasons for practitioners to remain in rural areas. Strategies which encourage people who are already familiar with rural life style to obtain qualifications are discussed.

This study is a response to requests from Catholic welfare agencies operating in rural areas of Australia who are faced with difficulties in attracting and retaining professional human services staff to rural communities.

Rural areas of Australia tend to have a distinct culture. There are a number of issues a new worker will be confronted by whilst adapting to a new environment. Apart from cultural differences, rural human service workers are also confronted with differences in service delivery in relation to organisational models and general lack of higher order services. Workers in rural areas need to have multiple skills yet many are confronted by the lack of quality professional supervision.

SKILLS AND REQUIREMENTS

Collier (1984) argues that the models used by urban trained professionals are inappropriate and that city—trained welfare workers bring urban values to rural practice. They then attempt to 'convert, patronise, romanticise and finally colonise rural dwellers'. Instead, workers need to see and understand what is happening and then construct ways of dealing with the realities. In this way appropriate models of service delivery can be developed.

Myths and Realities

Factors of isolation, distance and the need to be self—reliant have given rise to a number of different characteristics within rural communities. These factors have created a community with a common language and respect for each person's pride in their ability to 'go it alone'. A mutual understanding of what constitutes the 'last straw', an appreciation that there is no one else to help except the community and a belief that any one may need help at any time if disaster strikes, creates a close—knit social fabric in local communities (Lynn 1990, p. 17). It has been said by some social commentators that rural communities look after their own people and that they are suspicious and unaccepting of outsiders who do not understand local ways (Daffen 1987).

One of the biggest hurdles for a welfare worker employed in a rural area faces is gaining community acceptance. In communities where family lineage can be traced over many generations and everyone knows everyone else, it is difficult to accept someone whose background is unknown. Alienation can be severe if the practitioner does not find 'like minded' people with whom to associate (Sturmey 1992). For workers who have relocated away from friends and family networks, the isolation and the costs of telephone calls can be unbearable. Many have to cope with personal stress alone. Where family members have relocated with the worker, adjustment problems of family members add further stress. Trust is important in any setting, but it is more pronounced in rural areas where there is generally less acceptance by clients of seeking help and a greater suspicion of 'outsiders'. People living in rural and isolated areas tend to keep their problems to themselves or call on friends or the family doctor or solicitor. Professionals who are newcomers are distrusted and therefore kept at a distance resulting in a stand-off between the human service professional and locals (James 1989).

Within a small community these new community members will be faced with a loss of anonymity which may be a different experience compared to that experienced in urban areas. The differentiation between work and private life inevitably becomes obscured as within a small community they will encounter clients in social settings. People react differently to meeting a counsellor or social worker in the local supermarket. Some will pretend not to know the worker, others will avoid contact and others will want to continue the consultation right there and then. In urban areas these problems can be avoided by living in a different suburb to the one in which people work. In rural areas the loss of anonymity is unavoidable, requiring specific strategies on behalf of the worker to cope.

Attitudes

A common myth attributed to people living in rural areas is that they hold more conservative views than their urban counterparts. This conservatism is given expression through higher rates of marriage in rural areas, greater importance being placed on family life and attitudes towards traditional gender roles (ABS, 1992).

Another attitudinal study conducted by the Australian Institute of Family Studies found some difference between urban and rural attitudes. Discussion stressed that there could be a number of explanations and that in some cases differences were slight. Attitudes towards premarital sex and gender roles were found to be slightly more conservative than urban counterparts (Kelly 1989).

Health and welfare services are female dominated industries and a woman from an urban area who moves to a rural area, may find conservative attitudes towards gender roles problematic. Dealing with female rural clients also requires an awareness of rural culture.

Women in Rural Areas

Farm ownership is generally passed to the male side of a family. Womens' contribution to the operation of farms often remains unacknowledged. In the event of separation or divorce, legal decisions tend to favour the viability of the farm, resulting in women usually being disadvantaged in terms of the settlement (Chan 1983; Coorey 1988, Dempsy 1989).

For rural counsellors and human service workers, this may mean that women face great difficulty in escaping a violent marriage. Alston (1990) argues that rural counsellors must also be aware that rural women are often antagonistic to feminist ideology. Their conservatism towards the division of labour and support for the family are founded on a strong tradition of working in partnership with their husbands. Although such attitudes may be widespread, they are not universal (James, 1989).

Within their personal and professional lives, welfare workers would also be subjected to these gender—related values. Practitioners from urban areas may be attracted to rural life by the slower pace of living and the community spirit that exists in many rural areas. Clearly there are benefits in living in an unpolluted environment where one can feel secure in raising children. Problems are more likely to occur however, if the practitioner is unaware of the impact a different culture and expectations will have upon their lifestyle.

The normative model described in this section is not static. Therefore, a question that arises is whether or not a person from an urban culture faces greater difficulty in becoming accepted into a rural culture or whether the culture is sufficiently different within rural areas to mean that anyone non-local would experience difficulties.

HUMAN SERVICE ORGANISATIONS

People in urban areas are accustomed to demanding social services. They also have access to a greater range of services to satisfy their needs. In rural areas people are less accustomed to expressing their needs. Within a closed or tightly knit community, fear of community sanction can prevent people from expressing their needs, let alone being seen to ask for help from a professional welfare worker.

Research findings, think-tank discussions and conference proceedings indicate a number of factors which interact to produce difficulties in providing human services to rural areas of Australia. The main factors identified are: the lack of a critical mass resulting in limited service provision and therefore problems in the availability of qualified, experienced staff; government funding for fractional positions requiring staff with very broad based skills; and use of inappropriate models of service delivery.

Government Funding

Current Government funding practices at the Federal and State/territory level, have contributed to the inequitable nature of welfare service delivery in rural and remote areas. An extensive review of the available literature concurs with service providers' experiences that existing government funding practices encourage a service delivery system which is suited to addressing needs in an urban context (Rural and Remote Areas Unit, 1991; McKenzie, 1987; Greaney & Lees, 1989; Cheers, 1992.). These practices do not take into account the unique conditions that exist in a rural context.

Existing funding programs are narrowly defined and highly specialised to meet the vast array of needs that exist in our predominantly urban society. This focus means that unless potential service providers can show that their service conforms to specified guidelines, (eg, child protection, domestic violence prevention, or marriage and family counselling services), they will not obtain funds for rural and remote regions. The specialist orientation also means that scarce funds are used to target only specific community needs, often leaving fundamental issues unaddressed (Greaney & Lees 1989; Cheers 1992).

In practice the smaller populations in rural areas mean that a town may be eligible for funding for a domestic violence worker for 10 hours a week and a community worker for 5 hours a week, etc. This presents three problems. First, there is a shortage of specialist trained people in rural areas. Second, working in fractional positions may be unsuitable. Third, if an organisation was able to employ a specialist on a part-time basis it is unlikely there would be another practitioner to relieve the worker during annual or sick leave, etc.

Funding should be flexible to enable the rural human service worker to adapt programs to local requirements and circumstances. It is necessary for the welfare worker to be in tune with the local community so that they can respond to their needs. Where decisions are made by a removed central body, funding is likely to remain tied to inappropriate rural models. The requirement to satisfy funding specifications often works to inhibit the development of more appropriate service models.

Models of Service Delivery

Urban models of service delivery rely heavily on their ability to refer clients to specialist services in the local area. The concentration of population within a relatively small area enables people to specialise in different areas of service provision. These patterns are not available in less populated areas. Outlined below are models used by rural human service organisations. The need to utilise alternative service delivery models also has implications for the tertiary education system. New graduates are often ill equipped to cope with the requirements of rural service delivery and often apply for such positions as a last resort.

Existing service organisations tend to be concentrated in regional centres and service a wide catchment area. Clients are required to travel to the town. Alternatively service providers travel out to clients and/or establish satellite services in smaller towns.

Specialist services may also be provided by visiting service providers from out of town.

Much research, coupled with the experience of service providers, points to the advantages of generic service provision in rural/remote areas (Puckett & Frederico 1992; Lynn 1990; Greaney & Lees 1989). A generalist worker is able to make more contacts, has greater freedom to respond to the diverse needs that exist within a community, and can clarify demands, thus utilising specialist services more appropriately and effectively (McKenzie 1987). Such a worker is also able to more fully utilise existing community networks.

Where there are a limited number of services available in rural areas service organisations may employ multi-skilled practitioners or a number of specialist practitioners on a part-time basis. In recent years there has been an increased use of 008 or 'free call' telephone services to provide information and counselling services. Another model used by human service organisations to deliver services in rural areas is the use of a mobile service. This entails moving personnel, equipment and resources between communities.

Where resources are scarce, there is a tendency to encourage the formation of community self-help groups and the use of informal friendship networks to provide some of the services that would be the domain of professional staff in urban areas. Alternatively, organisations may attempt to use multi-purpose facilities and share premises with other service organisations. An advantage in these arrangements is that clients may freely enter the building without the purpose of their visit being publicly known.

The above models and the need to be multi-skilled in rural areas raise questions about the appropriateness of tertiary education courses to equip new graduates to undertake employment. Most tertiary education institutions are located in capital cities and offer highly specialised training, which may not include any rural content.

Professional Problems

An important issue for new staff is the lack of debriefing sessions, supervision and professional support from experienced staff. This is due to a number of reasons:

- the worker being a lone practitioner especially in the case of a Community source — the need to travel out to visit clients in surrounding areas may mean that the worker spends a great deal of time travelling between clients and so receives minimal peer review or contact with other workers in the same organisation; and — the limited availability of services results in a paucity of qualified supervisors or
- appropriate people with whom to network.

Setting up strong supportive networks is an essential element of rural work. This may require being highly creative and energetic in creating local networks. Welch, McKenna and Bock (1992) emphasise the usefulness of maintaining professional networks in metropolitan areas and in being a member of professional associations.

Access to further education and resource materials is often problematic (Weekes 1991). Information sent through the mail may take a long time and, when received, may be inappropriate or no longer relevant. The result is that rural workers may be isolated from developments in their own profession.

EDUCATION SYSTEM

The above discussion highlighted a range of potential difficulties faced by human service professionals, particularly those with previous employment backgrounds in urban-based services, in adapting to a rural environment. Research by Wise and Hays (1992) into problems of attraction and retention of medical practitioners highlights the need for both undergraduate and post graduate courses to contain material specific to the needs of rural practitioners. Rural practitioners ought to be consulted in the formation, content and design of such courses and the courses periodically revised to remain relevant.

Tertiary courses should also offer units which enhance the generalist skills of those people intending to take up positions in rural Australia. A review of the course outlines currently used in social work, social welfare and psychology schools in Australian tertiary institutions was undertaken to ascertain the rural content of courses available.

The results indicated that many of the courses cover aspects of welfare work in rural areas in their curriculum. These courses include subject areas such as alternative value systems, community development in different social settings, cross-cultural comparisons and stress management in rural services. Social work Degrees and Diplomas, in general, place emphasis on developing self-knowledge and encouraging students to explore their own stereotypical views and values.

However, it is argued that specific factors of rural lifestyle should be explicitly examined in light of the challenges of rural settings. Problems were also noted in that practical placements within a number of Degrees precluded rural placements relating to the fact that placements are divided into blocks of one to two weeks which would make travel to rural areas prohibitive due to time and cost.

People residing in rural areas are also confronted with the tyranny of distance in the form of extended travel time, additional costs in undertaking travel and living close to campus if they are to access educational facilities. These issues play an important role in determining whether people take up tertiary study. Decentralising training facilities is one of the most effective means of overcoming this problem (Concliffe 1991; Sturmey & Edwards 1991; Sturmey 1992).

In summary, the literature has identified a number of problems which may affect the retention and selection of qualified experienced staff in rural areas. It can be categorised on the basis on social or cultural aspects and work related issues. Questions arise relating to identifying the factors which attract people towards working in rural areas and whether or not having a rural background is an advantage. Discussion of employment issues gives rise to questions about the level and type of qualifications employees have or skills they have obtained but which are not recognised through formal qualifications. Finally, employers faced with problems in attracting and retaining personnel may have initiated specific strategies to alleviate the problems associated with the models of service delivery and unique stresses of working in rural areas.

The aim of this study was to examine the level and type of skills required by employers in human service organisations in rural areas and to identify strategies aimed at overcoming the problems associated with the selection and retention of personnel. Other aims were to identify gaps in the skills of employees currently providing human services and to seek opinions from respondents relating to reasons to remain in or to leave rural areas.

METHODOLOGY

a. Survey Design

The triangulation method was employed in this study. Initial contact was made with organisations and questionnaires sent to all employees within the organisation. A response rate of 57 per cent was achieved from the 110 questionnaires distributed. Three of the questionnaires were returned incomplete giving a total of 60 questionnaires for analysis. Structured interviews based on the practical and theoretical considerations raised in the review of existing literature were also conducted in situ with organisation managers.

b. Selection of Statistical Local Areas (SLAs)

Aboriginal communities have not been included in this research project due to limitations on time, finances and the researcher's inexperience with Aboriginal communities.

A total of five service towns were sampled from New South Wales, Queensland and Tasmania. These towns are classified as 'Rural Other' i.e. 'as being within a few hundred kilometres of a capital city or major urban centre...' (DCSH, 1991).

The size of the town's population was controlled for by selecting the SLAs with a standard score of between -0.5 and 0.5 and a population density of two or fewer people per kilometre squared. For each of the selected SLAs the number of hectares; kilometres from the provincial town (ranges from 64 to 90 km); and index of remoteness (range is 9.56 to 9.67) was obtained (Arundell, 1991). Finally five SLAs were randomly selected from the 14 which had previously been selected.

c. Selection of Service Organisations

Local Shire Councils were contacted and local telephone directories consulted to locate services. This revealed that all survey services in the selected SLAs with the exception of one community nurse, were provided from a larger centre within an adjoining SLA.

The four types of service organisations selected were: Community Health; Family Counselling; Family day care; and Home Care. Taped interviews with organisations' managers or directors took approximately one hour and were carried out during the months of March and April 1993.

RESULTS

The 60 questionnaires were coded and analysis was carried out using SPSS –. Outlined below is a profile of the sample population based on mean scores in each variable. This is followed by an analysis of work—related issues. A profile of professional qualifications is provided and finally a summary of responses concerned with working in rural areas.

a. Profile of Workers

Respondents were most likely to be a qualified nurse (37%), to be working with children (28%) or to be a counsellor (18%). There were few social workers (8%) in the areas surveyed. On average they had been working in rural areas for nine years and had been in their present position for four years. Respondents had been living in rural areas, on average, for 26 years.

26% of respondents were between 41 and 45 years old, a further 26% under 35 years of age and 17% were over 51. 47% of respondents who were 35 years old or younger, had been living in rural areas for 15 years or less, (of these 27% had lived in rural areas for less than 5 years) while 40% had lived in rural areas for over 16 years. 24% of the sample had been living in rural areas for between five and 20 years.

Of the 50 respondents who provided data on both their age and the number of years they have lived in rural areas, 22% had spent all their lives in rural areas. A further 8% spent up to 10 years away from rural areas.

The sample population was predominantly female (88%) with males (8%). 4% omitted the question. 12% of the sample were not married and 83% were or had been married. Respondents with five or more children represent 4% of the sample, 38% had three or four children while 37% had two children. 21% of respondents either did not have children or did not answer the question.

b. Working in Rural Areas

68% of the sample population stated that their present employment status was the most preferred. On average they worked 33 hours per week and earned between $25,000 and $30,000 per annum. 53% worked full-time whilst 33% worked part-time. 12% had worked in rural areas for a year or less, 38% for between 1 and 8 years and 25% for between 8 and 15 years.

Of the total respondents, 63%, had had a previous job in a rural area, 43% had held at least three jobs in rural areas and 38% have been working and living in rural areas for an equal number of years.

When giving multiple responses ill relation to location and length of service of previous jobs 55 people replied giving 107 responses. In Rural areas, 36% had spent less than five years and 11% had spent more than 11 years in each of their last two jobs. In Urban areas the corresponding figures were 28% less than five years and 4% more than 11 years.

47 people listed their present job title and their previous job titles. In 49% of these cases the title remained within the same category for all three positions. 47% had two jobs in the same and one in a different category. The remaining 4% had held jobs in three different categories.

c. Practical Experience and Formal Qualifications

Respondents were asked to make multiple responses on formal qualifications and practical expertise. Only one person stated they had no formal qualifications and eight people declined to answer the question.

The high number of Certificates (43%) reflected the high proportion of nurses in the sample. Nursing Certificates accounted for 20% of the certificates undertaken. Bachelors of Arts (6%) and Social Work or Social Studies (4%) were the most common Bachelor Degrees. 15% of the sample had undertaken Bachelor degrees.

Types of courses undertaken were predominantly in-services. Respondents reported that courses in counselling (4%) and child care (4%) were the most frequently undertaken.

On average, the 43 people who stated the date they completed or were to complete their course of study had been formally qualified for twelve years. This average reflected courses taken to update qualifications rather than original qualifications. In general however, qualifications were obtained whilst the respondents were in their twenties. Three of the respondents stated that they were presently studying.

Multiple responses were made in relation to respondents' education. The most frequent responses were related to the need for ongoing education and in-service courses (10%) were useful in this respect. 8% of respondents stated that their education and training had been appropriate. An equal number emphasised life skills (8%) and previous work experience rather than commenting directly on their education.

Counselling courses (4%) invoked comments in relation to the lack of practical content and group work experience. 4% of comments related to the lack of specific rural content in courses. Access to educational facilities was not a frequently mentioned problem.

Comments on practical expertise mentioned management issues (8%) in the context of the need for training. Expertise was obtained through in-service or trial-and-error learning following promotion into a supervisory or management position. Few comments were made on issues relating specifically to rural experience. Mention was made of those skills relating to working with people (8%), e.g., counselling skills (7%).

d. Comments on Working in Rural Areas

Respondents were asked to comment on why they chose to work and why they choose to stay in rural areas. Comments can be divided into aspects of rurality (26%) and into employment factors (17%). Comments about rural life emphasised the sense of community and a more relaxed, simpler lifestyle. Appreciation of the environment in general was mentioned as an important factor. Family relationships (5%), often the fact that a spouse worked in the area and that the respondent had a rural background, were recorded.

Factors relating to employment included satisfaction with the level of autonomy and the generalist nature of the work. Respondents commented that they enjoyed the challenge of coping with the variety of problems associated with rural areas and they felt there was a need to be met. Access to in-service was also mentioned.

A comparison of the nature of the comments and the number of years each respondent had been living in rural areas, revealed that lifestyle and community issues remained important regardless of how may years the person had lived in rural areas. Family issues appeared to be important in the first ten years and were then less frequently commented upon.

Fewer comments were given in relation to nominating the reasons as to why they would decide not to continue working in rural areas. Changes in circumstances related to work (15%) and family or personal issues (8%) were the most frequent comments. Emphasis on these issues remained fairly constant when related to the number of years the respondent had lived in rural areas. Only 6% of the comments indicated that respondents could think of no reason or would not choose to leave. Comments on issues relating to education were more frequent in the earlier years of living in rural areas.

Lack of career path and the need to expand skills were work-related concerns. Others were an increasing work load; the declining level of skills of potential referral sources; the amount of travelling on a daily basis which was tiring; the sense of isolation from work colleagues; and the lack of replacement staff.

Retirement, the desire to be closer to children now living in urban areas and changes in spouses' job were amongst family or personal reasons to no longer work in rural areas. Illness and age were other sources of concern.

e. Interview Data

Five interviews were conducted in each of the areas visited. A further three interviews were conducted with service providers. This section contains a summary of the main issues discussed under the general headings used during the interviews.

(i) Organisational Structure

In discussing organisational structure attention was paid to models of service delivery. The nature of services such as Family Day Care and Home Care Services meant that field workers and co-ordinators spent time travelling away from the main centre. For the purpose of fortnightly regional play groups, school halls, church halls or a carer's home were utilised. The major difficulty occurred with transportation and installation of equipment. Much of the Home Care was co-ordinated through the local nursing services.

It was found that counselling services used a variety of models of service delivery. All bar one of the services operated from major centres. Two of the counselling services did not have an outreach or satellite service which the other three had. Personnel in two cases travelled to the outreach centre whilst in the third a local person was employed on a fractional basis. None of the outreach services had full-timestaff.

Another model used was for specialist services to visit local areas. These service providers may travel between Shires, or may come in from a larger town or city. Within the counselling organisations this was not deemed to be a problem because the desire for confidentiality meant that local residents preferred to speak to an outsider. Where there were no visiting specialists many people travelled to a neighbouring town to receive services. In all cases the satellite services were by no means meeting demand.

There was little interaction between the community nurse and local hospital in three of the Shires. The community nurse was therefore generally a sole practitioner responsible for the development of their own position.

The wide geographical coverage of each organisation necessitated a great deal of travelling by service providers and/or clients. In the survey data, a distribution of hours worked per week, disclosed that 17% of the sample population spent between 10 and 18 hours travelling per week. 28% spent 5 hours travelling per week and on average the sample population spent 6 hours travelling per week.

(ii) *Staffing Requirements*

This section entailed discussion on present positions vacant and understaffing. The clear and universal response was the need for relief staff. In larger agencies where there were a number of employees, it was possible to spread the work load of a colleague who was absent. This was impossible for smaller organisations e.g., in the case of lone practitioners the service generally had to be closed. In three instances staff had accumulated up to two years annual leave and in a third, used annual leave to go on a trip with local residents. All the services surveyed with the exception of three, either had positions vacant, were in the process of interviewing applicants or had recently employed new staff.

(iii) *Selection and Retention of Staff*

Experience in selection and retention of staff and issues relating to advertising and interviewing applicants were discussed. Experience in attracting new staff was varied across the organisations. In one situation, 4 positions were advertised, statewide, but received only 7 applications. Out of 57 expressions of interest, 26 applications were received in another situation. All the applicants except one were new graduates. Another experience entailed local adverts receiving 30 responses of which 5 were interviewed for one position.

Local people were sought in that adverts were usually placed only in local newspapers. Many positions were part-time and it was reasoned that it would be difficult to attract workers from further afield. Problems were also experienced in finding someone with both qualifications and experience. Most of the organisations found that they had to choose between one or the other. Within nursing, the problems related to clinical versus community experience.

(iv) *Qualifications Sought and Specific Skills Required to Work in Rural Areas*

Discussion on this topic fell into the following three areas: legal or professional requirements; personal attributes; and generalist skills. Nursing, counselling and family day-care co—ordinators fell into the first category. Emphasis was then placed on personal attributes. Life skills were seen to be important in providing a worker with an empathy for their clients. Intuition and credibility could be built up through life experiences.

Life experience was also seen to be important in relation to developing a self-knowledge. Welfare workers who are isolated from other workers need a clear understanding of their own professional and personal needs. Through knowing these needs limits can be set in relation to the blurring of work and personal lives. This is important in avoiding burn-out.

Being married and having children was mentioned by a number of managers. It was suggested that the experience of raising children provides women, in particular, with numerous skills as well as a sense of identification with the community.

Important general skills discussed were: communication, listening, observation, adaptability and the ability to maintain confidentiality. Motivation, willingness to participate and an openness to rural life, dedication and hard work were also important factors in rural work.

Practitioners working in rural areas do not generally have access to help from a wide range of specialist or higher order services. Practitioners may frequently find themselves in a situation where they require skills and knowledge well beyond their basic education. In this way they require well-developed generalist skills from within a number of disciplines.

(v) *Further Education; Conferences; In-Service Training*

Questions were related to access to courses and any specific strategies used in updating skills. Time, access and costs were the main concerns voiced relating to education. Problems were created by the unavailability of relief staff to cover for workers taking study leave particularly for six-week residentials. Study time for workers with families and the travelling cost of attending courses were also problematic. Where courses were undertaken, motivation dwindled because there were few relevant post-graduate courses.

Access was a problem in the obvious sense of being removed from University campuses and facing a limited number of places in distance education courses. A further problem was related to obtaining reference material beyond the references supplied in course packs.

A number of strategies were suggested to alleviate these problems. It was suggested that workers should be given credit for practical experience and expertise to reduce the number of units required to complete a course of study and so make it more attractive. A call was made to decentralise educational institutions, either by taking individual courses to rural areas or by creating satellite campuses. Being in a rural area and adopting models used by service providers would heighten awareness of issues related to servicing rural areas.

Currently greater emphasis is placed on in-service and attending conferences. During informal discussions with staff members in a number of organisations, the importance of in-service was emphasised. In some organisations managers emphasised the availability rather than the utilisation of in-services. All organisations stipulated availability of in-service which may have been half a day per month, two courses per year or one seminar a year. In two instances a great deal of effort was put into utilising community resources to create courses to satisfy organisation requirements.

(vi) *Availability and Utilisation of Support Networks*

Discussion revolved around networking within and between other human service agencies.

Networks fulfil a number of functions on both a professional and community basis and are also essential for client referral. The necessity for many workers to spend time travelling between clients requires specific strategies to overcome lack of contact between colleagues.

Within agencies time was set apart for workers to discuss issues relating to specific cases, with co-workers. Where possible two people do visits together so that one could review the case management of a peer and provide opportunity to discuss alternative strategies. For sole practitioners, this approach was not possible. Their contacts had to be obtained through visiting practitioners or networks extended beyond the local area.

Emphasis was placed on the value of community networks by a number of interviewees. They found that sitting on local committees developed their knowledge of the area. In smaller communities this was also a mechanism by which to establish friendship networks.

Inter-organisation politics and 'power plays' sometimes prevent inter-agency networking. This may result in some service duplication whilst other needs are unmet.

(vii) *Strategies Used in Servicing Rural Areas*

Employers were interviewed on specific strategies employed to overcome difficulties related to working in rural areas. Most of the organisations had implemented strategies to assist workers. Other comments were made in relation to personal strategies used.

Three organisations used defensive driving courses as a strategy to assist workers who travelled extensively and were expected to know how to change tyres and to drive safely.

Isolation can be dangerous for workers entering a farm to confront a violent situation. One organisation insisted that workers contact police for assistance and also call base to confirm their safety. This was not always possible as there may be no access to a telephone. An expensive but useful tool would be a mobile phone. This would also be helpful in terms of being late returning from a visit or in the event of an accident or car trouble.

Larger organisations were able to rotate duties or areas covered by workers. This may alleviate stress, provide an opportunity for peer review of case work and prevent dependency relationships developing.

A supportive partner can be important in answering the phone or simply 'pulling it out of its socket!' On a personal basis, it is often up to the worker to set the limits of what is achievable, what is not and develop strategies to alleviate stress from lack of anonymity.

The issue of confidentiality and small town gossip led to two services choosing to operate from multi-service buildings to preserve clients' privacy. A similar problem was reported regarding identification of the car used by the financial adviser. In some instances people refused to allow 'the car' onto their premises.

Particular strategies caused disagreement, e.g., two organisations stated that they preferred not to create a distance between themselves and clients by wearing a uniform. Another organisation believed that the uniform enabled workers and clients to differentiate between work and leisure and provided greater community acceptance and entry into people's lives.

(viii) *Strategies in Obtaining Community Support and Acceptance*

The experience of interviewees was sought regarding community support for services and adaptation to cultural differences.

The reputation and social standing of the larger, established human service organisations enhanced community acceptance and support. Individuals who became identifiable through these organisation were reported to be more readily accepted into a community.

A strategy used to get community funding for the purchasing of motor vehicles was to place the name/logo of the sponsoring association on the car. The organisation found that people responded with a sense of responsibility and took delight in discussing 'their' car. Clearly, this situation was the reverse of the effect of the rural counsellor's car. It therefore illustrates the need to be adaptable and to use different strategies in different circumstances.

Parenthood and participating in local committees were seen as a means of getting to know local hierarchies and obtaining access to key figures. Warnings were given that at times, such involvement meant that maintaining client confidentiality was put under pressure.

Finally, there was little agreement as to whether or not having a rural background or a partner on the land helped workers to obtain community support and acceptance.

DISCUSSION

The factors raised in the literature related to problems in attracting and retaining qualified human service workers. Discussion emphasised cultural and professional differences between urban and rural areas.

Respondents to this study overwhelmingly saw aspects of lifestyle and community as the main attraction for remaining in rural areas. It is necessary for newcomers not only to be prepared for the challenges of a rural community but also to appreciate the rural lifestyle.

a. Importance of Rural Lifestyle

Thirty-eight per cent of the sample population had worked and lived in rural areas for the same number of years; the average age of respondents was 40-45 years; and the average number of years spent living in rural years was 26. It would seem that having a 'rural background' is not essential to living and working in rural areas. Wanting to live there and being attracted or challenged by rural life does however, seem to be an important factor.

Despite an average age of respondents of 40-45, generally they had worked in rural areas for only 9 years and lived in rural areas for 26 years. This may relate to several factors:

(i) When comparing age and years lived in rural areas, it was found that on average, respondents spent 20 years not living in rural areas. The remaining 78% appeared to move to rural areas in their thirties or forties.

(ii) Generally respondents obtained qualifications in their twenties, from major cities. This corresponds with ABS statistics showing a fall in the rural teenage population (1992).

(iii) Some qualified women ma)' have remained at home to raise the children and entered or returned to the workforce once the children were at school.

(iv) For 38% of the sample, the number of years that they had been living and working in rural areas corresponded. The data did not provide explanations for this coincidence but it would seem feasible that they moved to rural areas to take up a job.

In the interviews, emphasis was placed on the need for rural workers to be highly motivated and dedicated. Practitioners needed to possess an openness and willingness to learn and to adapt to a rural life style. Working in a rural area had to be their first choice not their last. It was suggested that these characteristics have as much validity as a rural background. A rural background might help but it was not considered to be essential.

Positive promotion of rural lifestyle and community need to be utilised to attract qualified, experienced practitioners to rural areas.

b. Working in Rural Areas

Once attracted to living in rural areas, employment becomes an important factor in the decision to remain in rural areas.

Regarding reasons for leaving rural areas, work-related issues were the most frequently mentioned and represented 15% of responses. A diverse range of issues were raised including: isolation, distances travelled, lack of career path, availability of work, lack of resources and the importance of access to in-service. Strategies need to be developed within each work place to minimise the stress or burnout of staff.

High levels of motivation and enthusiasm were observed within organisations, where attention was paid to developing strategies to assist workers. Interviews with managers within these organisations revealed a high level of commitment to staff networking, peer review and staff utilisation of in-service courses.

Low energy levels and 'brown-out' were most likely to occur in very small organisations or where the worker had little or no access to relief staff, supervision, in-service or peer support. Brown out was described by a person interviewed, as a state of collapse. Over time the worker begins to feel indispensable. There is a gradual convergence of their needs and client needs to the extent that all sense of objectivity is lost.

Professional input from peers and supervisors was seen as essential, especially within counselling areas. A couple of organisations provided informal supervision to workers outside of their organisation. Concern was expressed by the managers of these and one other organisation in relation to the time and costs involved. They stated that they could arrange the capacity to supervise lone workers but would require extra funding.

An area which received mixed response was the use of part-time workers. This did not seem to be a problem within nursing as there were often a number of registered nurses living within the area. For other organisations the availability of qualified local staff was more restricted and filling part-time positions was problematic. They found that few people were willing to relocate for a part--time position. A positive aspect of employing part-time workers for some organisations was the fact that this provided a pool of workers whose hours could be increased to provide relief work positions e.g. moving from teaching to counselling or nursing to child care. The survey data provided no clues as to why such dramatic occupation changes had occurred therefore this finding requires further research. These changes may reflect an under-utilisation of skills or a mechanism for multi-skilling if the person's skills are adequately updated.

Education

The educational needs of rural human service workers give rise to two problems: the needs of people presently working in rural areas and alleviating the problems experienced in recruiting qualified, experienced staff.

For people already working in rural areas, there were four important factors. Firstly, on average respondents obtained initial qualifications in their twenties. Secondly, combining a demanding job and a family left little time and energy for study. Thirdly, difficulties were experienced in accessing reference material and there was a sense that course work lacked relevance. Finally, 10% of respondents preferred in-service to formal education.

The absence of qualified social workers in most of the SLAs surveyed is an indication of the deprivation of social work skills in rural areas. Presumably community nurses develop and provide social work services.

It was concluded that a rural background was not essential for successful work in rural areas, however it is an advantage and a love of the lifestyle would seem to be a necessary factor. Therefore it is suggested that high school students in rural areas should be encouraged to continue into tertiary education, particularly into the human services sector, the presumption being that at some stage they will return to work in rural areas.

Because farmers tend to be relatively asset-rich, regardless of their actual financial position, this precludes many prospective rural students from obtaining AUSTUDY. This barrier would need to be removed to encourage students to continue their education.

Encouraging qualified people into positions in rural areas does not overcome the problems of lack of experience. This would require offering incentives to employers, in either urban or rural areas, to hire graduates on fixed-term contract to gain general experience.

Supervision for isolated workers is another possible strategy to increase retention of rural human service workers. This would best be achieved by loosening funding guidelines to enable larger organisations to provide such services.

The development of a tertiary Degree which specifically targets the generalist skills required by human service workers would be ideal. The prevalence of nurses in rural areas makes nursing schools the most appropriate provider of such a course.

Undergraduate Degrees in Social Work and Psychology need to develop courses which encourage students to work in rural areas. Emphasis needs to be placed on the challenges, as well as the benefits and problems of working in rural areas. If any lasting effect is to be achieved, a first step is to encourage and enable students to undertake a rural placement.

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AWARENESS, ANALYSIS & ACTION: DEVELOPING A MODEL TO ENHANCE COMMUNITY PARTICIPATION IN PRIMARY HEALTH CARE

Susan Stratigos and Janet Jones — Australia

ABSTRACT

The World Health Organisation (WHO) definition of health as a state of physical, mental and social well-being, means that analysis of the broader socio-economic and physical environment is fundamental to enhancing the health status of a community. It also means that specific perspectives,

supports and services may be necessary to address the needs of women because of the impact of their socially ascribed roles, for example, on their health status.

In this project which begins on February 14, 1994, three groups of women from the general community in Monto Shire will work with two senior policy officers from the Rural Health Policy Unit and the Women's Health Policy Unit respectively of Queensland Health on an 8 week study to identify the broad determinants of women's health in the area and indicate realistic ways of addressing relevant issues.

It is expected that topics to be examined will include the effect of rural recession and readjustment on women's double or triple workloads of unpaid and paid work; mental health, including depression and suicide in families; caring for the young, the sick, the handicapped and the aged in a rural setting; and transport, education and human services delivery.

The project has been planned in four stages organized around 2 three day workshops to be held in the Monto district.

Following the mutual interchange of basic information and identification of issues, the local women will collect and collate quantitative and qualitative data on their communities using the workshop's adaptation of the WHO rapid appraisal needs assessment (Annett & Rifkin). The government participants will contribute comparative, state and national data and information.

Analysis of the material will begin at the second workshop at the end of March. A report will be prepared jointly by community and government participants. It will present two aspects of the work — firstly, the development of a model for effective collaboration to increase community and government awareness of the symbiotic relationship between women's health and the well-being of small rural communities; and secondly, proposals for action which will go beyond the 'wish lists' which are sometimes the outcomes of conventional consultations.

I. BACKGROUND

In recent years, economic recession, rationalisation of rural services, a social justice focus on consumer rights and participation in decision making and recognition of the efficiency and cost effectiveness of community development models of change have emphasised the importance of community based action.

In the field of health care, Queensland Health's adoption of a Primary Health Care Policy (1993) carries this further. It assumes that individuals, communities and health professionals are able to enter into an effective partnership which can maintain and enhance well-being and health.

> The Primary Health Care Policy requires co-operation, collaboration and co-ordination between different government agencies and different levels of government and between the public, private and non-government sectors.

Individual and community self-reliance and participation are equally fundamental components of a Primary Health Care (PHC) approach. Increasing personal skills and knowledge and supporting community action are basic strategies to achieve the Policy's aim. Yet in introducing the Primary Health Care Implementation Plan, Ken Hayward, the Minister for Health, noted that "consumers feel powerless to change or influence the health system."[1]

Obviously there is a need to support consumers so that they can develop the confidence and competencies needed to direct change. Yet most of the strategies designed to achieve this concentrate on extending the knowledge or rights of individuals, or ensuring representation in relevant organisations and forums. Steps to encourage cohesive community based action are not well established. In health, as in other areas, there have been wide spread community consultations, but though individuals and groups may have a voice in decision making through them, consumers usually have little active involvement in the interpretation of their results or the development and implementation of policies derived from them. Indeed the very frequency of these consultations sometimes leads to fatigue and frustration. Often conducted without a clear exposition of the political and economic factors which may shape or constrain the possible results, consultations can become repetitions of unrealisable "wish lists", and so lead to disappointed expectations, cynicism and hostility. Government policy officers and planners, for their part, may grow increasingly dissatisfied with processes which, however well-intentioned, clearly do not achieve their purpose adequately.

Moreover, neither such consultations nor conventional data necessarily give politicians and planners the insight which can come from direct knowledge of the communities' experience of change.

II. GENESIS

Queensland Rural Women Inc (QRW) was established in 1993 by a small group in the hinterland of the area covered by the Wide Bay Regional Health Authority. The organisation was eager to take action to enhance the general well-being of rural women and invited the Rural Health Policy Unit and the Women's Health Policy Unit of Queensland Health to assist them.

A senior policy officer from each Unit attended the QRW conference in October 1993. Both officers recognised that in spite of the many skills, energy, commitment and initiative of the participants, most of them had little confidence in their ability to direct positive change in their communities. It was evident that some were also suffering from the "consultation fatigue" mentioned above.

In January 1994, in response to this, and the obvious need for action to enhance the health status of those who live in rural and remote areas, the officers proposed a collaborative action research project designed to stimulate the confidence and competence of women in small rural communities.

It was decided to develop a pilot model loosely based on the Rapid Community Health Needs Appraisal developed by Annett and Rifkin for the World Health Organisation.[2] However, the model would extend beyond the prototype to evolve into action research in which, after identifying and analysing factors undermining their well-being and health, women would chose one of these factors as the focus of practical community based action for change.

To counter-balance the perceived privilege usually accorded quantitative data and related methodologies, emphasis would be placed on qualitative data and approaches. Indeed, the project is firmly set within framework of qualitative research, as an exercise in critical social research as a process of inquiry which seeks to involve people in analysing their situation in order to ameliorate it. The designers recognised that "qualitative research typically involves a design that is emergent so that important decisions regarding the actual strategies for conducting the study are made on a continuing basis throughout the investigation" and decided the actual format of the model would evolve as the project progressed. This capacity for flexibility and self-adjustment would remain a characteristic of the project at every stage.[3]

Queensland Rural Women Inc accepted the idea in principle and arranged a series of two workshops in three small rural communities.

III. THE WHO RAPID APPRAISAL MODEL (ANNETT AND RIFKIN)

Rapid appraisal as a method of needs assessment was widely used by rural planners in less developed countries in the late 1970s. Subsequently the World Health Organisation (WHO) recognised its potential as a tool to gather better information and insights into health status in low income urban areas and formalised a set of **Guidelines for Rapid Appraisal to Assess Community Health Needs.** Though these Guidelines have been used in industrialised counties, the approach did not attract wide interest there, as the stated principles of PHC were formally introduced sometime after they had been accepted and incorporated into health planning in the Third World. In the meantime, most of the established, bio-medically based national health systems were generally satisfied with quantitative data acquired by conventional means and operated with narrow concepts of client input. Consumer participation in assessing these systems was not highly valued.

The adoption of the PHC Policy in Queensland and an increasingly vocal body of consumers in Queensland suggested an approach based on the WHO techniques could be useful here.

As formalised by Annett and Rifkin, the model presents a quick and cost effective way of acquiring qualitative data and valuable insights into the health issues of specific communities, urban or rural.

It involves the community, through key informants, in identifying issues, providing information and indicating ways of enhancing health status. It is a facilitated exercise carried out in the community by a multi-disciplinary team of professionals.

Its purpose is to gather data on community health needs as a basis for action plans to address them. It can also provide a means to assess the impact of current health policies on particular communities.

The Rapid Appraisal approach is firmly based on the principles of primary health care and clearly focussed on a social model of health. In practical terms, this means that the data needed must be collected in ways appropriate to the particular community. Moreover, a well as providing information, the community informants are involved in defining problems and indicating solutions. The professional team analyses the data, develops the action plan and implements it with the co-operation of the community.

Although the process is thus very community specific, and the methods and action used in one location is not necessarily applicable in another, the concepts and the methodology are transferable. The authors saw they could provide an appropriate basis for an innovative and "consumer friendly" approach to rural health issues in Queensland. Moreover, they recognised that by altering the balance of community and professional involvement, the model could yield a number of additional advantages.

IV. AWARENESS, ANALYSIS AND ACTION — THE MONTO PROJECT (STRATIGOS AND JONES)

The aim of the Monto Project' was to enhance the ability of women in small rural communities to improve their health status. This was achieved through two workshops in each centre in which facilitators assisted the participants to analyse determinants of their health and well-being and to identify a negative factor which was susceptible to change through small-scale community action. At the end of the second workshop, the facilitators assisted in the preparation of a strategic plan for this action and formally handed the project over to the women for implementation. This paper includes a description of the workshops, the issues identified and the projects selected. Progress since the workshops will be presented at the conference by the women who attended the workshops.

Thus the Monto Project, though initially derived from the WHO rapid appraisal methodology, quickly evolved into something quite different in both concept and design.

Whilst it does provide a basis for action to address a community health issue identified by the community, this aim is secondary, a residual benefit, to the goal of enhancing women's confidence and competence as agents of change. It should be emphasised, however, that it does not seek to empower the women; the model rests on the assumption that the women have the power to act effectively. This project seeks only to stimulate their awareness of it and to support it by the introduction of new techniques or approaches which may extend their skills. The concept of empowerment which underlies the project has been expressed in a recent article by conference keynote speaker Jonathan Sher:

> Properly understood, empowerment is the process by which all parties having a stake in rural development ... come to agreement around two essentials. First, they must find common ground at the conceptual level: what will be done and who will play which roles. Second, they must agree on an operational strategy for marshalling and applying the resources necessary for all stake-holders to have every reasonable chance of playing their role successfully... the power in empowerment comes from all stake-holders working together as a mutually supportive team.
>
> The empowerment process allows stakeholders to come together to figure which process of the action each can best accomplish on their own, which ones require support from other stake-holders, and which require joint action. In other words, it is the process by which ... goals can be reduced to manageable size and through which all stake-holders are helped to play to their individual and collective strengths ...'

The Monto project grew and of the recognition that if PHC policies are to be effective, there must be a shift in the balance of power between the professional and the community stake-holders.

In the Monto model, the issues are identified and analysed and the action plan developed and implemented by the women in the community. The role of the two health professionals is confined to the design and development of the model and the facilitation of the workshops. They also undertake to share their specialised skills and to contribute information and data to which they may have better access.

Like the WHO model, the **Awareness** (of the factors which have an impact, positive or negative, on the well-being of the community) **Analysis** (of these factors) and **Action** (to address an issue identified as susceptible to community action) approach embodies and supports the fundamental principles of PHC. Its focus, both theoretical and practical, derives from a social model of health.

In the WHO model, community involvement is mainly through the input of key informants identified by the professionals. The women who participated in the Queensland workshops responded to an open invitation from QRW, a self-selection process which indicated interest and motivation, though not necessarily any recognised expertise. Only a small proportion of them had formal training or experience in health or human services or would be described as obvious key informants. The fact that more than 20 busy women of diverse backgrounds attended both workshops in each centre and collected data in the intervening period, is an indication not only of their motivation, but of the importance of health issues in small rural communities.

The processes of both models are similar in that the information collected is kept to a minimum and confined to the directly relevant. It is collected in ways appropriate to the particular community. The value of qualitative data is emphasised in both models. The focus, form and implementation of the action plan is as community specific as the issue addressed. However, the general applicability of the approach and methodology and its potential adaptability to a wide range of settings and people received particular attention in the Monto model.

The multi-disciplinary and multi-sectoral composition of the professional team in the WHO model is paralleled by the range of formal and informal training, expertise and experience of the women who participated in the Monto Project. Their acute consciousness of the interaction of all aspects of socio-economic activities and environmental conditions ensured that they incorporated intersectoral perspectives into their data collection and action plans. Only one of their projects concerned itself with the conventional health care system. Interestingly enough in a setting so firmly within the PHC framework, it related to secondary, specialised medical services. The other two projects addressed the safety of women driving alone and the dissemination of information about existing community services.

This suggests the Monto model can provide a useful complement to conventional large scale consultations. It can also be a vehicle to enhance official understanding of the actual health priorities in rural communities where practical concerns may override ideological awareness or other policy imperatives. Conversely, the workshops provide a good forum to discuss and clarify the realities, potential and constraints along the continuum of consultation, policy development and implementation and service delivery and so should assist moving on from conventional "wish-lists" to realisable proposals for action.

Like the WHO rapid appraisal methods, the Monto model is quick and cost-effective. Its value added includes insight into community concerns and the impact of policies on rural communities, and enhanced community confidence and competence to take responsibility to direct and manage change.

V. THE LOCATION

The workshops were held in the townships of Miriam Vale, Monto and Mundubbera in the area covered by the Wide Bay Regional Health Authority. The Wide Bay Regional Health Authority covers 49,183 square kilometres with a population of approximately 167,000. It has an expected growth rate of 16% over the next decade. The Region contains the cities of Bundaberg, Hervey Bay and Maryborough and it conforms to the current Queensland pattern of a rapidly growing coastal strip and a depopulating rural hinterland.

The Miriam Vale Shire covers an area of 3709 sq km and has a population of a little over 3000. It has a projected growth rate of 1.4% for the 1991-96 period. The Monto Shire covers an area of 4283 sq km, has a population of approximately 2000 and a projected growth rate of -0.8% (1991-96). The Mundubbera Shire covers and area of 4148 sq km, has a population of approximately 2300 and a projected growth rate of -1.6% (1991-96). Women from Eidsvold and Gayndah also attended the workshops at Mundubbera so they could more accurately be described as the Central Burnett workshops. Eidsvold Shire covers 4789 sq km, has a population of just over 1000 and a projected negative growth rate (-0.5%). Gayndah Shire has a population of nearly 3000 over an area of 2707 sq km and is also anticipating a decline in population (-0.9%) between 1991-96.

The percentage of children (0-14 years) in the Wide Bay Region (22%) is close to the State average (23%). However the percentages of children in the five Shires under consideration are all over 24%, with Eidsvold and Monto Shires having more than a quarter of its population in this age range (1991 Census).

There is a higher proportion of older people (65 years and over) in this Regional Health Authority area than in the State as a whole (14.4% :: 12%). However, the pattern in the inland workshop catchments is congruent with the current trend of older people moving to the coast. The percentage of people over 65 years in Miriam Vale Shire is 8.9%, in Monto Shire 12.2%, and in the Central Burnett district 9.0% (1991 Census).

The main economic activities in Miriam Vale Shire are beef and dairy farming, timber and a growing tourist industry based on fishing, surfing and the adjacent National Parks. In Monto Shire beef, dairy and pig farming and timber and grain growing are the main industries. Monto is the main population centre. Mundubbera Shire grows half the State's citrus fruit and the Central Burnett district industries include beef, dairy and pig farming, cereal crops, timber and fruit growing.

Using data from the 1991 Census, the Epidemiology and Health Information Branch of Queensland Health developed an index of socio-economic disadvantage for the Statistical Local Areas of Queensland. This index used information on income levels, education, housing and occupation to produce an aggregate score for each area. The mean index score for the State was set at 200. Individual scores ranged from 230.6 (least disadvantaged) to 94.8 (most disadvantaged). The scores in the shires represented in this project were 205.6 (Monto), 201.6 (Mundubbera), both falling within the third percentile, 200 (Gayndah), in the fourth percentile, 187.4 (Eidsvold) and 181.4 (Miriam vale), the latter both being in the fifth percentile.

This index is a more powerful indicator of disadvantage than a single indicator. However, while 21.9% of all Queensland households reported an income of $16,000 or less at the time of 1991 Census, the comparative figures for the five Shires under consideration were 26.0% (Mundubbera), 28.1% (Gayndah), 30.3% (Monto), 31.5% (Eidsvold) and 34.4% (Miriam Vale).

The regional mortality rates from the major causes of death are similar to the State averages with the exceptions of the rate for accidents and injuries, which is higher, and the rates for cerebrovascular and respiratory disease which are both lower than the State average.

VI. THE PROCESS

The project was planned around two workshops in each of three centres selected by Queensland Rural Women Inc.

The initial design and preparation of material was done in the Program Development Branch of the Central Office of Queensland Health in Brisbane. At first it was intended to send the format and material ahead of the workshop, but it was decided to introduce this innovative approach personally. In retrospect, this still seems preferable. However, some participants who had had different expectations of the workshops (for example as seminars or information sessions on health issues or a conventional consultation) were initially confused or disappointed.

The two senior policy officers who designed and facilitated the workshops introduced the concept of the project and the aim and process of the day's workshops. The social model of health was only briefly delineated as it quickly became obvious that women in small rural communities have a very clear understanding of the social, economic and environmental factors which influence individual and community health and well-being.

The first exercise introduced participants to the tools and uses of social analysis in a non-threatening way. They were asked to divide into small groups (of about 5 to 8) to list some positive and some negative features which had previously affected women's health in this community. These broad features (for example close knit family groups or the absence of antibiotics) could be drawn equally well from tales of the distant past or from relatively recent personal experience. The women were then asked to explain why the factors selected had had positive or negative impacts on health (for example support and advice relevant to local circumstances was provided by family members, thus enhancing both the emotional health and caring skills of the women; or deaths occurred from diseases which are now seldom life threatening).

This approach was used again after morning tea. It should be noted that breaks for social interaction and attractive refreshments were integral to the atmosphere and running of the workshops as planned. At this point, the participants were asked to apply the same analytical techniques to the present.

A new element was then introduced: the use of the identified issues as the basis of the next part of the process. This involved selection, by general consensus, of an issue from the list of contemporary problems which would be the focus of action research.

Strong emphasis was placed on three points. Firstly, the issue/project had to be a practical one in which it was reasonable to expect that the workshop participants could affect positive change. For example, although it was agreed that high bank interest rates and expensive telephone and postage charges can have a negative impact on health and well-being, it was unrealistic to think that isolated community action could alter them.

Secondly, it was stressed that a relatively small local problem would be a good target. A project likely to offer tangible success in a relatively short time - say a year - would provide experience and positive re-enforcement from which more ambitious projects could be developed later.

Thirdly, the advantages of using the positive features identified in the past or the present as a source of strategies and strengths in the future were strenuously represented by the facilitators.

After lunch we moved into the future with a plenary discussion about the type of information needed to analyse the selected issue. The equal value of ideas and information and of qualitative and quantitative data was stressed. The participants identified sources of relevant information in their community and volunteered to investigate them. Responsibility for this was assigned to individuals or groups. The input of data from other regions and state, national or international experience was undertaken by the facilitators who also emphasised their continuing availability (through return telephone calls) to provide resources, support and advice in the coming weeks. They suggested ways in which information about environmental factors (physical, social or those conventionally recognised to affect health status), the community (including organisations, key people and material and non-material assets) and current government and non-government services, (community, welfare and health services) could be collected and used in the project. The importance of key informants, written records and personal observation was discussed.

A brainstorming session came up with a draft survey form. Whilst it was recognised that such an instrument and its application in rapid appraisal could not be regarded as having the validity of surveys developed and validated according to more rigorous standards, the value of the document as a tool for immediate local investigation was appreciated.

Basic information about the ethics, etiquette and techniques of effective interviewing was exchanged. The key words of this segment were courtesy, confidentiality, confirmation and clarification. It was suggested that a useful sample could be amassed if every women interviewed about five people. These could be family members or friends, as well as those identified by the group as key informants.

The data and documentation to be pooled at the second workshop were outlined. It was agreed that this would be held within three or four weeks. Newcomers would be welcome to join the original participants.

The concluding session highlighted the possibilities for future action. Whilst noting possible constraints and the need for realistic expectations, the focus was clearly on the potential of women as agents of change, especially when they were well armed with appropriate information.

At the conclusion of the workshop, the Regional Women's Health Adviser presented information and a video about breast screening. Although this might have diverted attention from the broader issues of the workshop, it was considered appropriate to offer some concrete information about a service which attracts considerable attention to balance the more abstract elements and hard work of the day.

It was gratifying and exciting to see that many of the original participants returned, most of them with data they had collected, for the second workshops. The aim of this workshop was to collate the data collected, report on the findings of the rapid assessment the women had conducted and to identify solutions and devise strategies to address the issue.

The facilitators were aware that their approach to community participation had caused some uncertainty, so the expectations of the workshop and of the whole project were again presented as clearly as possible as the day's work began. It had become apparent during the first workshop that there was considerable confusion about the role of consumer input in policy development and about the timeframes, pressures and priorities which could affect policy implementation. The flexible format allowed for the insertion, at this point, of a segment on the links in the consultation - policy development - implementation - service delivery chain, which replaced the session on a social model of health which had proved superfluous.

The participants then reported on their data collection. The positive and negative aspects of their work were discussed. The local women were surprised to find that the facilitators had also experienced delays and frustrations. The quantitative and qualitative data were collated and discussed and significant illustrative examples chosen. In small groups, the women then debated proposed approaches or solutions to the problem.

The actual selection of one of these as a focus for action planning proved a long and arduous process. The facilitators' first role was one of non-directive, low-key collaboration. After the strain involved before the group achieved consensus at the first workshop, a more structured and clearly defined process was set up for the next workshop. The result was much the same. On the third day, a compromise between the two approaches created a dynamic which did not succeed in diminishing the tensions. Unexpectedly, in a group of practical, motivated women, the point at which the project turned from analysis to action was perhaps the most difficult part of the process. This warrants particular attention as the model develops.

Having decided on a realisable aim for the proposed project, the group then developed a strategic plan to achieve it. The stimulation of the women's planning skills was both part of the overall project and an outcome of it. By afternoon tea time, an action plan had been drawn up and the facilitators formally handed the process over to a working party nominated by the participants. In each case, the working party set about its task immediately and with enthusiasm and the women began working towards practical change through a specific goal which was realisable through community action.

Back in Brisbane, the facilitators prepared a report on the whole process, including the collated data and case studies and copies of the proformas used. This was sent to key participants shortly after the second workshop. The officers also applied for funding to enable the further development and dissemination of a model which had been demonstrably successful.

VII. APPRAISAL AND EVALUATION

As this is an action research project which aims to achieve a stated practical outcome in a given time span, its success can be seen by the result at the end of each of the workshop series when women from the small rural communities had gained sufficient confidence to use their skills, longstanding and recently acquired, to plan action to improve their situation. As the model develops, it will be essential to incorporate ways of assessing its longer term impact on the well-being of the participants and their communities, with particular attention to the effectiveness of individuals and small groups as partners in PHC.

In the meantime, it was decided to eschew conventional tools such as forms to evaluate the process at the end of each workshop. Like attendance figures, these provide limited insight and may reflect peripheral or immediate environmental concerns rather than the effectiveness of a strategy.

However as part of a process of formative evaluation, it is useful to note those factors which were recognised as promoting or inhibiting (the positives and the negatives) the effectiveness of the methodology, process or outcomes.

Because of their day to day involvement with the macro- and micro- level factors which affect health and well-being, rural women have a keen appreciation of a social definition of health. There is no need to demonstrate the direct impact of transport, family ties or access to information. On the other hand, they are less interested in structural or theoretical issues than they are in the local provision of mainstream or alternative approaches to bio-medical services.

However, it is not the paradox of their appreciation of an holistic perspective of health with their concentration on medical services which causes frustration in both communities and health professionals. The difficulty is more a matter of mutual understanding of what can or might happen along the consultation, policy development, implementation and service delivery chain.

Realising this, especially after frustration verging on hostility which disturbed one workshop, the facilitators developed a segment called The Policy Chain which was introduced in the second workshop series. The salient points of this process were outlined, as well as the factors which could strengthen or weaken the links which held the chain together. One of the communities had previously had some success in getting what they needed by, as it were, swinging a heavy chain with energy and aggression. Some work was devoted to highlighting the limited possibilities of this technique in the long run, in comparison to the expanding potential of community action firmly based on accurate, relevant information.

In spite of the theoretical attraction of less structured and less directive approaches, it became evident that the logistic structure we had planned in Brisbane was essential to a successful workshop. Expectations of the workshops varied. It is clearly very important that everyone involved in organising and publicising the workshops is fully aware of the aims and processes of the project. It is equally important to begin with very clear statements of these, and to continue to emphasise them throughout the workshops. Women in a rural community have no difficulty with broad conceptual frameworks and abstract ideas; however, their major interests are practical and, at least initially, we veered too far from the concrete and were unnecessarily nervous of the demon directiveness.

We chose to include only a very few items of traditional health promotion or information. The women would have appreciated more, through their interest in our more conceptual work may have been diluted. The decision to confine health promotion information to the lunch break or the end of the day was valid in terms of time and interest levels. However, the presence and active participation of up to three health workers from the Regional Health Authority was supportive in many ways to all concerned. The clear message of ongoing co-operation and collaboration at all levels was at least as important as the information exchanged at the workshops.

The data collected by the local women was collated by one of the facilitators, who also prepared the report on each workshop. Ways to incorporate wider participation in these processes should be developed.

Certain points needed constant emphasis throughout both workshops. The need for a realistic approach and an achievable aim required considerable repetition. The women needed reassurance of their potential as agents of change. It was necessary to stress that waiting for the government to respond to a 'they should' approach may not be very successful, and will be counter-productive if it stifles or undermines community confidence and initiative. The participants were frequently reminded that qualitative and quantitative information are both valid and that the knowledge and ideas which come from all levels of experience are valued and valuable.

The evolving model was demonstrably successful as the women developed their ability to analyse factors which affect their health and well-being, agreed on an issue as a focus for change, collected relevant data and used it as the basis of an action plan to work towards it. The women's appreciation of their potential as active partners in directing change was stimulated and they learnt new techniques and approaches to assist them in this role. The policy officers acquired valuable insights into local priorities, community dynamics and the micro-level impact of macro-level policies which it might be difficult to gain through conventional consultation or representation. They worked with local women in developing a model which was not only clearly effective in achieving its stated aims, but can be adapted for other settings and different groups.

The success of the model as a process does not in fact depend on the outcomes of the community action it stimulated. However, the results so far, which the co-ordinator of each working group will present to the conference, suggest the AAA model will be justified and its effectiveness re-enforced by practical results.

[1] Queensland Health (1993) - Putting people first - a charter for change: implementation plan - Primary Health Care Policy, Brisbane, p1.

[2] World Health Organisation (1988) - Improving urban health: guidelines for rapid appraisal to assess community health needs - a focus on health improvements for low-income urban areas. Geneva.

[3] Rodgers, B.L & Cowles, K.V. (1993) - The qualitative research audit trail: a complex collection of documentation. Research in Nursing & Health 16, pp216-226.

[4] This "short title," derived from the town where QRW originated, became attached to the whole project although Monto was only one of the three centres where it was developed.

[5] Sher, J.P. & Sher, K.R. (1994) - Beyond conventional wisdom: rural development as if Australia's rural people and communities really mattered. Journal of Research in Rural Education 10.1, pp2-43.

POSTER SESSIONS

A PILOT STUDY OF PSYCHO-SOCIAL MORBIDITY IN RURAL GENERAL PRACTICE

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BACKGROUND AND OBJECTIVE OF THE PILOT STUDY

There has been long running criticism of inadequate mental health care in Western Australia, particularly in rural areas where psychiatric services are still under-developed considering the growing need for them (Health Dept of WA 1991).

It has been reported that country people experience 10% more illness, 28% more hypertension and psychiatric disorders than their urban counterparts. Family violence and stress related illnesses, eg asthma, heart attacks, ulcers and alcoholism have increased and so has the incidence of suicides (Wong 1990). Rural teenagers have accounted for 42% of all suicides in this age group in WA, although they make up only 28% of the state's teenage population (Health Dept of WA 1991). Against a background of serious maldistribution of human and physical resources in rural WA, rural people are the most disadvantaged in their ability to access mental health services (WACOSS 1992, Stockwell 1991). Therefore they are in double jeopardy: their risk of developing a mental illness is high but the likelihood of their need being adequately attended to is low.

The Bunbury/Wellington area of the South West region of WA is such a rural area where there is a community and professional concern that the existing mental health services are not meeting the load or the type of problems encountered. It needs to be acknowledged that these services were not set up in response to a comprehensive needs analysis of the community or with any formal strategic regional plan to meet the identified needs of consumers (Gee 1993).

According to the National Rural Health Conference (Dept of Community Services and Health 1991), none of the studies on health needs in rural communities have so far addressed health needs as distinct from health services deficiencies. Hence there is an urgent need for research to identify and quantify health needs of rural communities in order to provide the basis for effective planning and resource management.

Bunbury/Wellington region, which is the most densely populated rural region of WA, with a population of 60, 938 (ABS 1991 Census).

The pilot study described in this paper was carried out to test the feasibility of capturing information on the amount and type of psychosocial morbidity encountered in the setting of rural general practice. It was undertaken in the smaller neighbouring rural community of Busselton in October 1993.

MORBIDITY IN GENERAL PRACTICE

It is generally acknowledged that general practice provides a suitable field, for collecting information about the nature and extent of the psychosocial morbidity in a community. According to Goldberg & Huxley (1980), the family doctor's consulting rooms continue to be a suitable venue for research studies into common disorders, since the majority of mentally ill individuals are likely to attend their doctor. Indeed, psychiatry related consultations are up to a third of all consultations in primary care (Mann 1990), and neuroses and personality disorders form the second most common condition for consultation in general practice morbidity in Australia (Holman 1985).

Mental illness progresses through different levels and filters (Figure 1) before a hospital admission is necessary at the last level. The GP has the crucial role of detecting (Filter 2) and referring (Filter 3) psychosocial morbidity, and hence has an important influence on the amount and type of mental illness that is subsequently cared for in the mental health sector (Sharp & Morrell 1989).

Figure 1: Goldberg and Huxley's model and the one-year period prevalence rates at each level of morbidity.

Level 1 250/1,000	Psychiatric morbidity in the community
	1st filter: the decision to consult
Level 2 230/1,000	Total primary care morbidity
	2nd filter: general practitioner recognition
Level 3 140/1,000	Conspicuous primary care morbidity
	3rd filter: the decision to refer
Level 4 17/1,000	All psychiatric out-patients
	4th filter: the decision to admit
Level 5 6/1,000	Psychiatric in-patients

Source: Goldberg and Huxley (1980).

General practice also provides an economical field for collecting data on the extent and nature of morbidity. Studies in Australia have shown that general practitioners can be used to estimate general morbidity in the community even when their participation rates are as low as 29% (O'Toole et al 1991). Also their patients can be used to estimate levels of morbidity in the community provided they are randomly selected (Driver et al 1991). In their study, few significant differences were found in demographic characteristics, reasons for encounter and diagnosis between two groups of patients: one consisting of a sample of 539 encounters with the 25 participating GPs and a second group consisting of a sample of 500 patients identified from a household survey who had consulted with a GP within two weeks of the interview. These results increased the confidence in this method as a reliable and cheaper source of information about community morbidity.

Using general practitioners to estimate psychological morbidity in the community, from the conspicuous morbidity at level 3 of Goldberg and Huxley's model (Figure 1), was pioneered by Shepherd et al in England in 1966. The team studied a one in eight sample of patients attending 76 general practitioners in London for a period of one year. A comparable study has not been conducted in Australia to date, although several Australian studies have undertaken to measure psychiatric morbidity in the community (level 1of Figure 1), the most recent one being in the rural Riverland Region (South Australia Health Commission, 1991).

There are several methodological issues which have hampered general practice research in this field and they are discussed here with reference to the rural setting of this survey.

1. Definition of the population at risk
2. Identification of the psychiatric case
3. The use of an appropriate diagnostic classification
4. Selection of doctors

METHODOLOGICAL CONSIDERATIONS

1. Definition of the population at risk

One measure of the extent of mental illness is the one-year period prevalence rate. This has been used by Goldberg & Huxley (1980) to estimate the prevalence of morbidity in general practice. It refers to the number of people who suffer from a mental illness on at least one occasion during the course of a calendar year. It is expressed per 1,000 population at risk rather than as a percentage of all those attending doctors and will only count each person once.

Unlike those in Britain, Australia's general practitioners do not have registered patient lists which form the denominator. Therefore studies have relied on encounter-based national statistics (Bridges-Webb et al 1992) or small scale studies with incomplete data. In some instances the general practice morbidity has been calculated from a denominator of patients attending general practice, but this will under-represent some sections of the population such as the young, fit and fully employed.

In Australia, it has been estimated that 85% of the population attend a general practitioner in any one year (Commonwealth of Australia), while in England, estimates of general practice attendance in any one year is 60-70%. In the rural Riverland region of South Australia, the GP attendance rate in a period of 12 months was 83.3%.

Provided there is a large representative sample of primary care physicians participating in a survey, and provided the populations receiving care are representative of the general population, then the population at risk should be approximated by the proportion of people in that population who seek care each year. This should be a reasonable assumption given that the percentage of general practice attendance is as high as 85%.

2. Case Identification

The most widely used instruments for case identification are the structured psychiatric interviews and diagnostic instruments such as the General Health Questionnaire (GHQ) and the Present State Examination (PSE) which have been used in Household Surveys. Unfortunately these tools are inappropriate in a general practice setting because they are quite time consuming.

However by seeking a consultation in general practice, the patients have already defined themselves as cases. For the purposes of this survey, cases fell into one of two groups: those patients whose reason for their encounter with the GP was a mental health problem or complaint, or those patients who consult their GP for other reasons in which the GP saw psychological or emotional disturbance as an important component. This case definition is similar to the one adopted by Shepherd et al (1966) under the two headings: "Formal Psychiatric Illness" and "Psychiatric Associated Conditions".

3. The Diagnostic Classification

The classifications of psychiatric disorder that have been used so far are quite inappropriate for primary care because categories are restricted to formal psychiatric illness and therefore tend to give misleadingly low estimates of psychiatric morbidity (Sharp & Morrell 1989). Some of the classifications that have been used include:

- DSM III, the Diagnostic and Statistical Manual of Mental Disorders, Third Edition.
- ICD-9, the International Classification of Disease, Ninth Edition.
- ICHPPC-2, the International Classification of Health Problems in Primary Care, Second Edition.

A more recent classification of morbidity for primary care is the ICPC, the International Classification of Primary Care, which was devised specifically for use in general practice (Lambert & Woods 1987). It has been used satisfactorily in a 1990-91 survey on morbidity and treatment in general practice in Australia (Bridges-Webb et al 1992). It takes into account that morbidity may be defined in terms of disease entities or symptoms and complaints. It seems particularly appropriate in psychiatric morbidity where a firm diagnosis is not always possible when the illness is often seen in its very early stages. In this study therefore, the illness presenting during the encounter could have been recorded in terms of:

- psychological symptoms and complaints
- diagnosis/diseases

- social problems

The underlying social problems are noted because they may be an important determinant of the sort of symptoms the patient develops and the treatment sought. For the purposes of this survey, the psychological and social problems referred to in the ICPC were combined into one tabular list which was supplied to GPs as a reference for the appropriate coding of symptoms, diseases or social problems (Appendix).

4. The Selection of Doctors

GP research has been criticised because the potential bias in the recruitment of volunteer doctors may lead to an inability to generalise the findings. Most studies have relied on volunteer doctors because it has proved impossible to persuade random samples of GPs to take part in morbidity surveys (Shepherd et al 1966 and Marks et al 1979). The doctor's response bias has been evaluated in many studies by comparing the practice profile of those who responded with that of those who did not respond. There were no significant differences detected between the two groups (Driver et al 1991, Bridges-Webb et al 1992).

Doctors do however differ in their threshold for psychiatric case identification, and the accuracy of their diagnosis. Doctors also have different characteristics which influence the level of their reporting, such as: time pressure, age and experience, interest and concern, interview style and specific psychiatric focus (Goldberg and Huxley 1980).

One attempts to minimise the impact of these doctor-specific characteristics by securing a group of doctors as large and as representative as possible. One advantage to undertaking general practice surveys in confined rural areas, is that the probability of obtaining participation from the majority of GPs is greater. Thus by covering a large proportion of the at-risk population and the providers, sampling and self-selection biases will be minimised.

The current investigation was a pilot study in the Busselton town, for the survey now in progress in the Bunbury/Wellington region. It was undertaken to test if the research design can accommodate the above mentioned methodological issues, in order to meet the objective of the study.

METHOD

All of the thirteen doctors (4 practices) who serve the Busselton town (population 13,514) were asked to take part in this pilot study. A letter was sent to each doctor, outlining the nature of the proposed survey and asking for his/her cooperation. This was followed by a meeting with the interested GPs to discuss the data collection procedure.

The instrument for data collection consisted of a questionnaire to be completed by the GP for each patient with a mental health problem, with whom the GP made contact: whether as a result of a surgery consultation, a home or nursing home/ hospital visit, for a period of two weeks. The data collected comprised: age, gender, marital status, educational and employment status and ethnicity of the patients and their parents. The corresponding psychological symptoms/complaints, the diagnosis and the underlying social problems were coded by the GP according to the ICPC. Data on the treatment prescribed, the source of referral to the GP and to whom the GP referred the patients was also gathered. An instruction manual was supplied to help the GPs with the coding.

Eight of the thirteen GPs (a participation rate of 62%) agreed to take part in the survey. Two GPs were on leave, and three were not willing to participate. One practice out of the four was not represented in the survey. Unfortunately, the only female doctor participating in the survey dropped out after the first week of data collection.

A total of 58 patients presented with mental health problems for the two-week period. To increase the small sample size, the participating GPs were asked to contribute for one more week. Information on further 19 patients was supplied by three interested GPs, bringing up the total to 77 patients.

Although the small number of subjects limit the value of the results that follow, they are of considerable interest because they serve as pointers for the main survey. Wherever feasible, comparisons were made with a similar pilot study in London, where for a period of 2 months, 9 GPs gathered information on 88 mentally-ill patients (Cooper et al 1962).

RESULTS

The approximate one-year period prevalence rate

One year period prevalence = Point prevalence + Annual inception rate
(Goldberg & Huxley 1980)

For these rates we need to define:

1 – The population at risk
2 – The number of patients consulting for a mental illness at a point in time (or a short time period)
3 – The number of patients consulting for the first time during a year with a new mental illness.

The approximate prevalence rate was computed as follows, after taking into consideration the fact that 58 patients presented to participating GPs in a period of 2 weeks:

1 – The population at risk = total population of Busselton (1991 Census) x proportion seeking care in any one year =

$$13{,}514 \times 0.85 = 11{,}487$$

This is the population at risk if all 11 working GPs participated in the survey (the remaining 2 GPs were on leave).

Since only 7 GPs took part effectively, the population at risk becomes: $11{,}487 \times \frac{7}{11} = 7{,}310$

2 – The number of patients consulting for a mental illness in a short time period is 58.

The point prevalence rate is

$$\frac{58}{7{,}310} \times 1{,}000 = 7.9/1{,}000$$

3. – The number of patients consulting for a new mental illness constitutes 38% of the prevalent cases in this study, that is

$$58 \times 0.38 = 22$$

By extrapolating the number of patients with a new illness to one year

$$22 \times 26 \text{ weeks} = 572 \text{ patients/year}$$

The annual inception rate is

$$\frac{572}{7{,}310} \times 1{,}000 = 78.2/1{,}000$$

Therefore the approximate one-year period prevalence rate is:

$$7.9/1{,}000 + 78.2/1{,}000 = 86.1/1{,}000$$

This is the conspicuous primary care morbidity or the morbidity recognised by the general practitioner. To what extent this figure represents the real psychosocial morbidity in rural general practice is discussed in the last section.

Sex Distribution

Males and females consulted GPs for mental illness in approximately equal proportions: 47% of the sample were men and 53% were women. This is an atypical result as the female preponderance is reported in many international studies, and particularly in the comparable pilot study of Cooper et al (Table 1).

This result could be interpreted in terms of the self-selection of volunteer doctors, in particular by the lack of participation of women doctors in this pilot study. It is known that women doctors tend to attract a high proportion of female patients (Shepherd et al 1966). In this study, out of the 3 women doctors in Busselton, only one participated for a small part of the data collection period while the remaining 2 women doctors said they were too busy to participate.

Table 1: Comparison of the sex distribution of individuals with mental health problems in 3 different studies

	Male	Female	Total
Cooper's pilot study (1962)	22 25%	66 75%	88 100%
Riverland study (1991)	123 47%	139 53%	262 100%
This pilot study (1993)	36 47%	41 53%	77 100%

However the Riverland study, which is a household survey, reported the sex distribution of its sample in exactly the same proportions as the pilot study in Busselton (Table 1). Moreover, the Riverland study has shown that a higher rate of lifetime disorder is present in males than females. Could this be an emerging pattern in rural Australia, where reported rates of mental illness is increasing in the male population? However this finding is further supported by an urban study on the prevalence of psychiatric disorder in Canberra (Henderson et al 1979). The Canberra findings point to a higher rate of minor psychiatric illness in men compared to what is commonly found elsewhere, thus explaining the absence of any sex difference in morbidity detected in this survey.

Age distribution

The age range of patients varied from 8 to 93 years with a mean age of 50 years (SD = 22 yrs). There is a typical preponderance of disorder in the middle aged groups 30-59 years, and a rather atypical preponderance in the aged 70 years and over who make up 25% of the sample. However this is not surprising given that 17% of the GP visits were to nursing homes.

The nursing home population may have inflated the size of the elderly group in the sample, within the short data collection period. Over a longer period, the numbers of this elderly group may stay the same, while other age groups are better represented. In this study 8% of the elderly group encountered their GP in the surgery, which is a more plausible proportion considering that the age group 70 years and over make up 10.3% of the population of Busselton. On the other hand, it is worth noting that the proportion of cases with mental illness would be much higher in the nursing homes than in the community.

Marital Status

Studies have shown that the conspicuous primary care morbidity is highest among those married but living apart, followed in descending order by divorced, widowed, married living together and single (Marks 1979).

Table 2: Marital status distribution in the pilot study sample and in the general population of Busselton

	Single	Married	Separated	Divorced	Widowed
(Persons aged 15 yrs or more)					
% in sample	9.6	61.6	5.5	5.5	17.8
% in general population	22.6	62.7	2.9	4.7	7.2

PS: No age adjustment has been applied to these figures

In this sample the same pattern applies (Table 2). There is more illness diagnosed among the separated, divorced and widowed, and less in the married and much less in the single. The same concerns which apply to the nursing home population may also be relevant to the widowed population.

Ethnicity

The questions on ethnicity were directed at assessing the mental illness in the first and second generations of the immigrant population, whether from mainly English speaking backgrounds (MESB) and non-English speaking backgrounds (NESB). Higher rates of mental illness have been reported for these 2 groups (Jayasuriya et al 1992, Ratnayeke 1985). The need to give a special attention to the second generation of NESB is emphasised in the literature for 3 reasons (Graeme 1990):

- their number is sizeable in WA
- their problems are different from the other Australian-born groups
- they have a strong concentration in the vulnerable young age groups, who are more predisposed to mental problems. Hence this group combines 3 risk factors: young, ethnic and rural

Table 3: The ethnic distribution in the pilot study sample and the general population of Busselton

	% MESB		%NESB		% born in Australia	
	Sample	Population	Sample	Population	Sample	Population
Birthplace of patient	11.7	12.8	2.6	3.4	85.7 *	82.5
Birthplace of Mother	24.7	13.2	3.9	3.0	71.4 *	83.4
Birthplace of Father	23.4	15.2	3.9	4.4	72.7 *	79.2

* includes not stated

Despite the small sample size, the NESB group is represented in the sample in proportions that are comparable with those in the general population (Table 3). The surprising finding is the high proportion of patients whose mother or father is from MESB. Although there has been a slight reluctance or awkwardness on the part of some GPs to ask about the ethnic background of their patients, this is more likely to have resulted in an under-estimation rather than an over-estimation. Furthermore, this observation is not due to the large group of 70 years and over, because the data on the MESB of both parents is evenly spread among the middle age groups.

Two patients from Aboriginal background consulted the GP during the data collection period, one of whom was from outside Busselton (Manjimup).

Psychosocial Morbidity, Referral and Treatment

The most frequent diagnosis made by the GPs was depressive disorder (31.2%) followed by anxiety disorder (14.3%) and dementia (10.4%), the last being a reflection of the large group of 70 years and over.

Although 19.5% of the sample were not given a definite diagnosis at the time of the encounter or had some unspecified disorders, they all exhibited at least one psychological symptom or complaint, which was considered by the GP to be an important component of the encounter.

Feeling anxious/nervous was the most frequent first complaint (32.5%) followed by feeling depressed/miserable (19.5%), acute stress (11.7%) and disturbance of memory (11.7%) which is in line with the dementia diagnosis. Insomnia was the most frequent second and third complaint.

Relationship problems between partners and divorce or loss of partner formed the most frequent social problem mentioned by the patients (22.1%). This was followed by problems with working conditions (9.1%) and being ill (9.1%) as the second most frequent problems.

83% of the patients in the sample did not need a referral from their GP, 8% were referred to a psychiatrist, and 3% to a psychologist. This low referral rate is in line with an estimation for referral given by the GPs in another study of rural mental illness – the Central Wheatbelt Study (Lewin and Hobbs 1992): "these GPs considered that less than 20% of the patients they see with mental health problems actually need more help than they can give them themselves".

This really constitutes a heavy load the GPs are taking on, particularly when follow-up studies have indicated that 50% of these patients are still symptomatic at one year, and 20-25% are still symptomatic at three years (Mann et al 1981).

The chronicity of the mental health problems in this study is reflected by 62% of the patients having consulted their GPs previously for the same complaint. Cooper et al (1962) have indicated in their pilot study in general practice that 46.6% of the psychiatric patients have a chronic illness compared to 24.4% of the non-psychiatric patients.

For those who were not referred, 15.6% did not need any treatment, 34.4% received therapeutic counselling from their GP, 28.1% were given both medication and counselling, and 21.9% were put on medication alone. Thus with nearly 63% of the encounters having an associated counselling component , consultations for neurotic disorders take up on average more of the doctor's time than consultations for other types of illness.

73% of the patient encounters took place in the surgery, 10% in the hospital, and 17% in the nursing homes. The absence of home visits is notable.

62.3% of the patients were self-referred, 14.3% were referred by the Dept of Social Security or nursing home staff and 19.5% by a family member (parent, sibling or spouse). In the main survey, such data should provide an insight on the network of social support and the level of co-operation between the general practitioners and other health and community services.

DISCUSSION

This pilot study has met its objective in that it has established the adequacy of the methodology to be used in the main survey.

The participating GPs reported no difficulties in referring to the International Classification of Primary Care (ICPC) list to code symptoms, diseases and social problems, and in administering the questionnaire or the time involved. Questions on the ethnic background of the patients and their parents had to be amended in a way that made GPs more comfortable about obtaining the information.

Despite the small sample size, the findings are in general plausible: the demographic characteristics of this sample of patients with psychosocial problems do not differ from those in similar studies, and the morbidity follows the same pattern as that reported in the literature. Other differences that might be a characteristic of the area under investigation will have to be evaluated in the main survey.

The extent of mental illness in this rural community is measured by the approximate one-year period prevalence rate of 86.1/1,000 population at risk. This is the "conspicuous primary care morbidity" or the morbidity recognised by the general practitioner (Figure 1). To what extent this figure represents the real psychosocial morbidity in general practice cannot be determined due to the limited scope of this pilot study. However, comparing it to rates reported from other primary care settings, shows that it does not vary a great deal from the American figures, but quite different from the British one.

Shepherd (Britain)	139.4/1,000 (Chidren 15 yrs or younger not included)
De Facto (USA)	90.0/1,000
Pasamanick (USA)	93.4/1,000

Nevertheless, it is impossible to evaluate the differences in rates from rural Australian settings with those from urban British or American settings, because the criteria employed, the populations studied and the health care systems are quite different. Therefore it is probably more important to replicate the methodology described here in other rural settings in Australia, for valid comparisons to be made.

However, in their most recent estimates of community psychiatric morbidity, Goldberg & Huxley (1991) have shown how the improved awareness of GPs for psychological problems (following the introduction of a mental illness at-risk register) has increased the prevalence rate of the recognised illness from 101.5/1,000 to 196/1,000 (Table 4). Indeed, studies have indicated that primary care physicians were failing to detect one third of the psychiatric illnesses among their patients (Goldberg and Blackwell 1979). Also in their model, Goldberg and Huxley (1980) have estimated that only about 60 per cent of the total primary care morbidity is detected by the GP, with the other 40 per cent remaining hidden. It is gratifying to see that increasing the awareness of the GP for such problems, results in narrowing the gap between the actual morbidity in the community and the recognised morbidity by the GP.

Table 4: Annual period prevalences of mental disorders per 1,000 population at risk.

	1982/93 Data from Greater Manchester	1989/90 Data from South Manchester
Mental Disorders in the community	250-315	250-315
Mental Disorders among GP attenders	230	257
Mental Disorders recognised by GP*	101.5	196

*Obtained from National Morbidity Surveys.

Source: *Goldberg* 1990

In rural Australia, psychological morbidity in the community was estimated to be 260/1,000 from the 1991 Riverland study. (This is the six-month period prevalence rate, so the annual prevalence rate is expected to be even higher). It is clear that there is a significant gap between the 2 levels of morbidity. What can be done to bridge this gap?

It is recognised that early detection and intervention for individuals who are developing, or at high risk of developing, mental health problems, reduces the likelihood of the development of potentially disabling effects of these problems (Australian Health Ministers' Conference 1992). Hence there is a need to strengthen the role of the general practitioner in early detection and intervention, particularly in rural areas, where mental health services are not meeting the needs of the community.

Therefore, in response to the recommendations of the Burdekin report on mental illness in Australia, the Australian Medical Association has already called for (Australia Doctor, March 1994):

- Medicare benefits to be introduced for GPs treating mental health patients, as the present system discriminates financially against GPs who spend more time with a patient.
- Increased undergraduate teaching of psychiatry with an emphasis on community based or liaison psychiatry.
- The Divisions of General Practice to help GPs acquire and share counselling skills, foster links between support organisations and organise clinical case conferencing for groups of GPs, especially in rural areas.

Also as far as research is concerned, GPs should be better supported to encourage them to take part in general practice research. They have access to a wealth of information and can provide a relatively inexpensive source of morbidity statistics but their time restraints are great. This research has been approved as a Practice Assessment Activity by the Royal Australian College of General Practitioners, making it just one way the collaborating GPs could be compensated for their efforts and the extra time pressure incurred by the data collection.

Finally, looking back (Figure 1) at the estimated numbers of patients that trickle down to the psychiatric services as outpatients (17/1,000) or inpatients (6/1,000) from the initial 250/1,000 in the community, it is not an exaggeration to join M. Shepherd in his conclusion: "the cardinal requirement for improvement of the mental health services is not a large expansion and proliferation of psychiatric agencies, but rather a strengthening of the family doctor in his therapeutic role". This is particularly true in rural areas.

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APPENDIX

INTERNATIONAL CLASSIFICATION OF PRIMARY CARE ICPC TABULAR LIST FOR PSYCHO-SOCIAL PROBLEMS

P – PSYCHOLOGICAL SYMPTOMS AND COMPLAINTS

P01	FEELING ANXIOUS/NERVOUS/TENSE/INADEQUATE/ FRIGHTENED/WORRIED
P02	ACUTE STRESS/TRANSIENT SITUATIONAL DISTURBANCE/REACTION TO BEREAVEMENT OR RAPE/VIOLENCE
P03	FEELING DEPRESSED/HOPELESS/MISERABLE/ EXCESSIVE CRYING
P04	FEELING/BEHAVING IRRITABLE/ANGRY
P05	FEELING/BEHAVING OLD, SENILE/CONCERN WITH AGING
P06	DISTURBANCES OF SLEEP/INSOMNIA/NIGHTMARES
P07	INHIBITION/LOSS/LACK OF SEXUAL DESIRE/EXCITEMENT
P08	INHIBITION/LOSS/LACK OF SEXUAL FULFILMENT SUCH AS IMPOTENCE OR PREMATURE EJACULATION
P09	CONCERN WITH SEXUAL PREFERENCE SUCH AS HOMOSEXUALITY, EXHIBITIONISM ,ETC.....
P10	STAMMERING, STUTTERING, TICS
P11	EATING PROBLEMS IN CHILDREN
P12	BEDWETTING, ENURESIS
P13	ALCOHOL ABUSE/WITHDRAWAL PROBLEMS
P14	TOBACCO ABUSE
P15	MEDICINAL ABUSE
P16	DRUG ABUSE/SNIFFING/WITHDRAWAL PROBLEMS
P17	DISTURBANCES OF MEMORY/CONCENTRATION/ ORIENTATION/CONFUSION/HALLUCINATION/ AMNESIA
P18	OVERACTIVE CHILD, HYPERKINETIC
P19	OTHER CONCERN WITH BEHAVIOUR OF CHILD/JEALOUSY/EXCESSIVE SHYNESS/SCHOOL PHOBIA
P20	OTHER SYMPT./COMPLT. CONCERNING BEHAVIOUR OF ADOLESCENT
P21	SPECIFIC LEARNING PROBLEMS/DELAY IN DEVELOPMENT/DYSLEXIA:CHILD/ADOLESCENT
P22	FEAR OF MENTAL DISORDER
P23	DISABILITY/IMPAIRMENT
P24	PHASE OF LIFE PROBLEM IN ADULTS: e.g. FOR WOMEN; PREGNANCY, INFERTILITY, MENOPAUSE, PRE-MENSTRUAL TENSION
P25	OTHER PSYCHOLOGICAL SYMPTONS AND COMPLAINTS e.g. SOMATISATION
P98	NO SYMPTOMS

D – DIAGNOSIS/DISEASES

D01	DEMENTIA (INCL. SENILE, ALZHEIMER)
D02	OTHER ORGANIC PSYCHOSIS
D03	SCHIZOPHRENIA, ALL TYPES/PARANOID STATE
D04	AFFECTIVE PSYCHOSIS/MELANCHOLIA/ HYPOMANIA/MANIC DEPRESSIVE
D05	ANXIETY DISORDER/ANXIETY STATE/PANIC ATTACKS
D06	HYSTERICAL/HYPOCHRONDRIACAL DISORDER

D07	DEPRESSIVE DISORDER
D08	SUICIDE ATTEMPT/SUICIDAL TENDENCIES
D09	NEURASTHENIA, SURMENAGE
D10	OTHER NEUROTIC DISORDER/AGORAPHOBIA/ CLAUSTROPHOBIA/OBSESSIVE NEUROSIS
D11	PERSONALITY DISORDER SUCH AS AGGRESSIVE, ASOCIAL, COMPULSIVE,PASSIVE
D12	MENTAL RETARDATION
D13	OTHER/UNSPECIFIED PSYCHOSES/DISORDERS
D99	NOT DIAGNOSED

S – SOCIAL PROBLEMS

S01	PROBLEMS SOCIAL, CULTURAL SYSTEM/MIGRATION, DISCRIMINATION
S02	PROBLEMS WITH WORKING CONDITIONS, OCCUPATIONAL PROBLEMS
S03	PROBLEMS WITH BEING UNEMPLOYED
S04	PROBLEMS WITH EDUCATION, SCHOOL ENVIRONMENT, ILLITERACY
S05	PROBLEMS WITH SOCIAL INSURANCE/WELFARE/FINANCE
S06	PROBLEMS LEGAL/POLICE
S07	PROBLEMS HEALTH CARE SYSTEM/ACCESS/AVAILABILITY
S08	PROBLEMS WITH BEING ILL
S09	RELATIONSHIP PROBLEMS BETWEEN PARENTS OR PARTNERS
S10	PROBLEMS WITH BEHAVIOUR OF PARTNER, SUCH AS ALCOHOL OR DRUG ADDICTION, GAMBLING, ETC.
S11	PROBLEMS WITH PARTNER BEING ILL
S12	LOSS OR DEATH OF PARTNER/DIVORCE/ SEPARATION
S13	RELATIONSHIP PROBLEMS WITH CHILD: BATTERING, NEGLECT, VIOLENCE, ABUSE
S14	PROBLEMS WITH CHILD BEING ILL
S15	LOSS OR DEATH OF CHILD
S16	RELATIONSHIP PROBLEMS WITH PARENT/OTHER FAMILY MEMBER/FRIENDS
S17	PROBLEMS WITH BEHAVIOUR PARENT/OTHER FAMILY MEMBER
S18	PROBLEMS WITH PARENT/OTHER FAMILY MEMBER BEING ILL
S19	LOSS OR DEATH OF PARENT/OTHER FAMILY MEMBER
S20	PROBLEMS RESULTING FROM ASSAULTS/HARMFUL EVENTS/RAPE
S21	OTHER SOCIAL PROBLEMS (PLEASE SPECIFY) -
S98	NO PROBLEMS
S99	NOT KNOWN

OUTREACH EDUCATION IN PALLIATIVE CARE: A PROGRAM TO SUPPORT THE CARE OF DYING PEOPLE IN RURAL COMMUNITIES

Will Cairns, Mercia Barrett, Yvonne Mateos , Kim Watson, Nikki Blackwell, Alison Ambrose – Australia

ABSTRACT

Patients dying in small rural communities need the same standard of palliative care as those dying in larger centres. The Palliative Care Service based at the Townsville General Hospital embarked on an outreach education program to promote the development of skills of rural health workers.

A group of speakers was taken to small hospitals throughout the Region over a four month period in 1993. The program presented in each town covered the major area of palliative care including control of symptoms and dealing with death, loss and grief.

PROLOGUE

Palliative Care is the care of people who have an illness for which cure is not possible and for whom the focus is on the relief of the consequences of their illness. This usually applies to the last weeks or months of life and involves the treatment of symptoms such as pain, nausea, weakness etc., and dealing with the issues surrounding death, loss and grief that are raised by incurable illness. Palliative Care usually involves support for the family after the death of their relative.

INTRODUCTION

This paper has been written to describe an education program which was undertaken in 1993. The goals of the program were:

1. To promote the practise of palliative care in rural communities.
2. To encourage the development of skills in palliative care for rural health care workers.
3. To inform rural health care workers of support available from the newly created Palliative Care Service.

BACKGROUND

The provision of palliative care within communities involves the integration of skills provided by a variety of health care workers including doctors, nurses, social workers, counsellors, pharmacists, physiotherapists, occupational therapists, chaplains and other hospital or community workers. In large towns and cities, all these skills are readily available and individual workers may themselves have experience palliative care, or have access to educational opportunities to acquire the necessary skills. Health care workers in smaller towns are disadvantaged for a number of reasons.

1. They do not have the full range of colleagues with the skills of palliative care and often an individual may be required to wear a number of "hats",
2. They have limited access to opportunities for upgrading their skills.
3. They usually have limited numbers of patients receiving palliative care each year, and so they have difficulty maintaining their skills and acquiring experience.
4. They are required by virtue of isolation to maintain their skills in the full gamut of health care practice, thus palliative care may not be a high priority compared to say trauma or obstetrics. These features cause difficulties for health care professionals delivering, and for consumers in obtaining palliative care in rural areas.

The Northern Region, is one of thirteen health regions into which Queensland has been divided. This Region covers an area of some 410,000 sq. kilometres. (Victoria 228,000 sq. km, Great Britain 260,000 sq. km, or Texas 690,000 sq. km). The Region extends from The Great Barrier Reef to the border of the Northern Territory and the Gulf of Carpentaria. The major centre of Townsville, has a population of around 130,000, and is the site of specialised medical services in the north. These include a teaching hospital and university based nursing training. Townsville will be the site of the Regional Cancer Treatment Centre (currently under construction). The remainder of the population of 90,000 inhabit small towns along a 400 km stretch of the coastal Bruce Highway, and 1,200 km of the Flinders Highway west to Mount Isa and the Northern Territory border. Each of the smaller towns has a small hospital with 1-3 doctors and has from 0-6 General Practitioners. Mount Isa has 20 doctors in the hospital and 7 General Practitioners in the community. The main industries of these towns are primary production of sugar and small crops on the coast, and beef, wool and mining in the western areas. People located in these small towns develop the same range of fatal diseases as the rest of the population. Patients usually travel to Townsville or Brisbane for attempted curative treatment. However, if this treatment proves unsuccessful, they usually prefer to return home for the terminal phase of their illness. It is these people who require the services of palliative care in rural communities.

The Palliative Care Service (PCS) at Townsville General Hospital was created with a grant from the Queensland Cancer Fund (QCF) to the Northern Regional Health Authority. The QCF awarded the grant of $250,000 per year for a period of five years, with the goal of creating a model for the delivery of palliative care to a provincial centre. The reason this grant was awarded to Townsville rather than other centres was that Townsville already had an active Palliative Care Association (TPCA) with a three year history of palliative care education and a very active membership. The Palliative Care Service was launched in early 1993. It was already apparent that education for health care workers in Townsville was fairly well catered for, whereas the needs of health care professionals in the more remote areas were not being met.

This situation had been highlighted by a trial in which a nurse was charged with murdering terminally ill patients in one of the small towns in the Region. Lack of knowledge or confidence in current practice in palliative care caused many nurses in particular, to express their concerns regarding the use of medication to relieve symptoms such as pain. In 1992, a one-day seminar had been held in that town to try to provide support for the paradigm of Palliative Care.

It was into this environment that the Palliative Care Service embarked on its Outreach Education program. The reason we decided to run an outreach program was to reach a large proportion of staff of each hospital. If they had been required to travel to Townsville, it would be unlikely that even one or two health care workers from each town would attend. Given the choice, many might have opted to participate in a course on say "Obstetrics" or "Trauma."

EDUCATION PROGRAM

The Palliative Care Service created a program around the skills of the staff of the Palliative Care Service and the Region to cover the range of issues of most importance in palliative care.

1. Introduction to Palliative Care including a discussion of principles and goals.
2. The management of symptoms including pain, nausea, constipation, dyspnoea and confusion. This included drug and non-drug measures.
3. Discussion of ethical issues raised by palliative care including management of the last days and hours of life.
4. Dealing with communication and the issues of loss and grief for patients and their families.
5. Discussion of the use of complementary methods including acupuncture, massage, Reiki, meditation, hypnosis and aromatherapy.
6. Community Resources available for Palliative Care including the use of resources of the Queensland Cancer Fund.
7. Identification and networking of palliative care services within the Region.

Speakers at the Education programs included the Medical Director of the Palliative Care Service, a doctor from Mount Isa with specific interest and experience in palliative care, the Clinical Nurse Consultant and counsellors from the Palliative Care Service and the Patient & Community Services Officer from the Queensland Cancer Fund.

Contact was made with the Medical Superintendents and Directors of Nursing at each outback hospital and an itinerary of intended visits arranged throughout the Region. Over a period of four months from July to October 1993, nine hospitals were visited with the team travelling distances of 2,700 km by car, 900 km by plane, and 900km by bus. Our audience varied in size from four or five in Richmond and Julia Creek to about 60 in Mount Isa. The numbers were made up predominantly of nurses of various grades, and also included doctors, physiotherapists, social workers, occupational therapists and chaplains among others.

ASSESSMENT

The overall reaction was very positive, with particular comment on the organisation and content of the program. The positive reaction may have been because much of our audience had very limited opportunity for further education, and appreciated that we had travelled to their communities. In some towns, the small number of participants allowed discussion of difficult issues of loss and grief and review of the cases that they had to deal with. We were impressed with the skills the staff displayed. Perhaps because of their small communities, they were very aware of the social needs of patients and their families. Their care often extended beyond the conventional definition of duty.

When they discussed deaths in their community, it was very apparent that they grieved both as professionals and for the loss of a member of their personal community. This dual role may produce stress beyond that of the urban palliative care professional. The reception at the time was almost universally positive, with the exception of a few people who found the concepts difficult to dealt with, partly because the program content stirred up difficult issues in their own lives.

FUTURE PLANS

We decided to have a fairly long period before assessment as most of the smaller towns would only have a small number of terminally ill patients each year and may experience difficulty assessing change in the short term.

In July 1994, we begin our follow-up assessment of the program to determine what effect our outreach program has had on the communities visited. We will be endeavouring to determine what changes, if any, resulted from our efforts and what our audiences might want from further education programs, and intend to contact all the participants still working at each hospital.

NEEDS ANALYSIS OF PEOPLE WITH A DISABILITY LIVING IN REMOTE AND RURAL AREAS OF NSW

Lindsay Gething, Tracey Poynter, Glenn Redmayne and Felicity Reynolds — Australia

ABSTRACT

The aims of the project were to locate people with disabilities living in remote and rural areas of NSW, to identify their needs with regard to service provision, and to develop innovative strategies which address unmet needs.

This paper provides an overview of the project. Those interested in obtaining further information are referred to the document entitled "Across the Divide. Solutions Distance, Diversity and Disability". This document is published in two volumes. Volume I looks at general issues arising for people with disabilities living in remote and rural areas. Volume II focuses on issues arising for Aboriginal people with disabilities living in remote and rural areas.

To the researchers' knowledge this is the first time that information of this breadth has been used as the basis for making recommendations about services for people with disabilities in remote and rural areas of Australia. This methodology provided access to systematically-collected information which rarely has been available for decision makers. The project gathered and integrated information about service provision from a wide range of sources to draw a picture taken from many perspectives including those of people with disabilities, carers, families, service providers and representatives of peak disability organisations; analysis of statistics and usage rates; and collation of published literature and other information. The project produced a set of recommendations or action oriented strategies designed to improve service provision. Many of these strategies are resource neutral, some require funding. Some already may be on the agenda of government departments or disability organisations, others involve reconceptualisation and the implementation of different models of service provision from those used in urban environments. Many of the issues which are important for people with disabilities living in remote and rural areas are also relevant for people with disabilities in general (whether they live in urban, remote or rural locations) and people in general (with and without disability) living in remote and rural locations. Any attempt to isolate those issues specific to the target group would have produced an unrealistic picture of needs and issues. Thus, much of the material emanating from the project has implications which extend beyond the target group for this particular investigation.

PHILOSOPHICAL FRAMEWORK

The project was conducted within the following philosophical framework:

- 'Customer focus': people with disabilities are individuals and services must have an individual focus rather than stereotyping people and assuming that because they have a disability they have the same needs, interests and abilities.
- Services (both generic and disability-specific) should assist people with disabilities in achieving empowerment, independence, quality of life and access to facilities.
- People with disabilities should play an active and equal role in planning and implementation of services (on an individual level, as members of committees and as employees).
- Most people with disabilities are not ill or sick, therefore models of service provision and organisations which are responsible for providing services should focus on 'wellness' and well people.
- Regions and areas are different, and service provision must be flexible to take into account geographic, social and economic variation. In particular it is important to remember that remote and rural areas are not the same, although they do share some common features which distinguish them from urban environments.

METHODOLOGY

The following conclusions were derived from a data collection which was designed to take into account several perspectives:

(a) Consultations with people with disabilities, families and service providers which were held in Sydney with peak and key organisations and through field trips to four selected areas of NSW. (Three field trips looked at issues arising for people with disabilities in remote and rural areas in general, while the fourth focused on issues for Aboriginal and Torres Strait Island people with disabilities). A large number of people with disabilities, service providers and peak disability groups were consulted during the research process. Their views, experiences and information about services in remote and rural areas provide an invaluable perspective.

(b) A literature review which incorporated Australian and overseas material.

(c) Compilation of an indepth resource and usage inventory which describes services throughout NSW and an indepth description of the service environment in one major rural and remote region of NSW.

(d) Analysis of statistical and other information.

RESULTS

Living in a remote and rural area has many advantages. These include clean air, open spaces and (in many areas) a strong sense of community and mutual respect. However there can be disadvantages.

The overriding themes emerging from this project were that major issues to be addressed in regard to service provision relate to transport, distance, isolation, consumer involvement, the nature of service provision (flexibility, coordination, location and the nature of work for service providers), community and service provider education, and patterns of communication. These themes are summarised below:

Distance. Greater distances to be covered and generally limited public transport infrastructure require a flexible approach to be taken to improving services. The issue is not just a matter of distance, but also of limited infrastructure available to transport people at reasonable cost across both large and short distances and of high costs associated with using a car as the major form of transport. For example, most public transport in remote and rural areas (when it is available) is inaccessible for people who use a wheelchair or who have mobility restrictions. Only a few of the larger regional centres have wheelchair-accessible taxis. Problems associated with distance occur for people with disabilities, carers, service providers and agencies. These issues which arise for all people living outside major cities, are compounded for people with disabilities. Strategies emanating from the project suggest a model of service provision which is designed to suit the needs of people with disabilities in country environments and which addresses the higher costs associated with transport of individuals, goods and services.

> "It is going to be difficult to access post-school training for my child if we can't arrange transport to get her to it." (Parent of a child with a disability)

Isolation. Isolation is an accepted part of the chosen lifestyle for most country people. It reflects not only geographic, but also social, cultural and family factors. The nature of remote and rural living is isolating in itself, however disability should not heighten isolation. Isolation and disability often contribute to feelings of loneliness and severely impinge on people's abilities to politicise the issues concerning them and to lobby decision makers. People with disabilities living in remote areas have limited opportunities to meet in groups and to join gatherings. Those in rural centres have more opportunity, but problems associated with physical access and transport often prevent such meetings. The infrastructure of many rural towns inhibits participation for people with disabilities. This results in segregation, hampered social development and continued entrenchment of the belief that people with and without disabilities are different. Distance from services raises many issues in regard to obtaining services, respite care, support and access to facilities. Issues include overcoming the effects of isolation, providing assistance to families who act as carers and for providing services for Aboriginal people who live in isolated communities.

Service provision. This issue generated the widest range of comments during consultations and field trips. In many cases views were expressed with some forcefulness and emotion. It was clear that people with disabilities, families and carers could report many negative encounters with services. In addition, many service providers reported that they were working under difficult conditions and often felt that they did not obtain adequate support or recognition from their organisations. Many agencies and organisations had given very little thought to the appropriateness of their services within remote and rural areas. Some provided no services, expecting clients to come to Sydney. Other agencies were aware of deficits but had little idea of how to address them. Many organisations were not fully aware of the needs of people with disabilities living in remote and rural areas and had few statistics about their client populations or about the population diversity within their catchment areas. While organisations were aware that people with disabilities were experiencing problems, organisations were unable to indicate the extent of the problem or specific concerns of these clients. Issues concerning Aboriginal and NESB people with disabilities were largely undocumented and organisations had limited contact with these groups. However, organisations strongly believed that attention should be directed towards ensuring that these people were not excluded from service provision.

Consumer involvement. From consultations it became apparent that people with disabilities are frequently not consulted about the services provided for them. Many people believe this has resulted in wastage of resources and in services which are not tailored to the needs of residents of remote and rural areas. Flexibility. A major theme arising from the project is the need for flexibility in service provision. Services must be tailored to the individual and to the environment. strategies which may work in the city may not necessarily be effective in remote and rural areas. Many agencies have yet to recognise this.

Coordination. Greater coordination between services is required to achieve more effective use of resources, reduce duplication between services and reduce the number of gaps in service provision in remote and rural areas. Strategies are provided for enhancing coordination between services and between service providers.

> "I've known people to fall between services and so are unable to access anything. For example, a man in my caseload with a mental illness is not eligible to access disability employment support services." (Service provider, Dubbo)

Location of services. Consumers expressed a clear preference for provision of services locally. For many reasons, local service provision is perceived as more effective and satisfactory for the client. These reasons include reducing disruption, distress and discomfort associated with travel and difficulty in obtaining regular access to services and to follow-up visits.

Service providers. The project revealed that it is difficult to attract professionals to work in the country and that turn-over rates are high. Many service providers stated they were working under very difficult conditions and that they did not obtain adequate support or recognition from their organisations. Coleman (1987) notes the need to develop career paths for rural workers and to develop networks between staff working in different organisations. Service providers in remote and rural areas have to be all things to all people, they feel isolated and lack peer support and backup. The more remote the worker, the more likely that s/he will be required to manage a diverse case load. Specialists have been reluctant to establish themselves in rural settings (Fanning, 1993). McKenzie (1992) notes that a strong growth in service industry professions, combined with introduction of standards have resulted in a denigration of nonprofessional staff and an associated reduction in their numbers, even where professional staff are not available. In addition, features of rural employment such as lack of peer support, gender role conflict, blurring of roles, lack of close proximity to other service providers and unrealistic expectations often result in stress, burnout, high staff turnover rates and lack of continuity between workers. Many professionals return to the city as soon as they are able to obtain a position. According to Fanning (1993), burn-out is common in remote and rural areas. Strategies are presented which are designed to enhance attractiveness of employment in remote and rural areas to attract and retain high quality staff. These strategies are designed to enhance career opportunities, provide status and financial incentives and improve the quality of work life.

Disability awareness education. Evidence from a wide range of sources suggests an urgent need for disability awareness education for service providers and for members of the wider community. Attitudes and beliefs act as major barriers to implementation of recent legislation. It was reported during consultations that many personnel in generic services were not willing to work with people with disabilities and considerable fear still existed within the community about issues associated with disability. Many people seem to believe that it is not their responsibility and that they are not trained to attend to clients with disabilities. Furthermore, many workers come to an area with inappropriate values and attempt to impose these on to others. These attitudes and values were acquired during education and city practice and often do not apply in remote locations. It was also reported that medical staff were often ignorant about disabilities, resulting in major problems with diagnosis and in accessing services. Doctors and other medical professionals often do not have up-to-date information. There were many claims of lack of skills in identifying symptoms, especially for intellectual disability. This lack hindered commencement of early intervention programs for clients. It was also reported that many doctors and medical professionals did not know what disability services were available in their local areas. As medical personnel are often the first and only contact a person has with the health system, they must take the responsibility to refer clients to appropriate services.

> "I don't think Home Care workers are trained to work with people who are severely disabled. They often won't service these people. I've felt guilty about requesting a service because I was told that someone else (an old person) was missing out on their shower so my adult child could receive a service." (Parent, Dubbo)

The community's awareness of issues associated with disability was frequently raised as a concern. Parents and carers believed the general public was not aware of issues and was not taught about people with disabilities nor about the nature and scope of disabilities. Many country centres have been the base for 'cradle to grave' institutions which have taken responsibility for the care of people with disabilities. As a result, people with disabilities in many country communities have been segregated from the rest of the population and there has been little opportunity for people with and without disability to get to know each other or to break down negative attitudes and myths about disability. High levels of fear and discomfort still exist in most areas, as does prejudice and discrimination. Wide acceptance exists in many places for old models of service provision which are no longer regarded as appropriate elsewhere and which recent legislation is designed to change.

Information about services and professional education. Many people with disabilities and service providers report difficulty in obtaining up-to-date information. Consumers commented that some service providers seemed poorly informed about disability issues. Strategies are proposed to provide up-to-date information for personnel working in remote and rural areas and for preparing professionals during preregistration education for working in remote and rural areas. One proposed strategy involves extending computer networks and disability data bases. This technology also could be used by people with disabilities.

Computer networks and communications technology. Australia has a history of using technology to overcome the tyranny of distance. Strategies are suggested which build on existing technology and services to address issues such as isolation, difficulty in networking between people with disabilities and service providers and difficulty in obtaining access to up-to-date information.

The above themes over-ride all others impinging on service needs associated with access to community life and its resources; protection of rights; carers and respite care; accommodation; employment; education; loneliness; politicising of issues, and availability of aids, equipment and appliances.

Particular attention was given in the project to three groups of people who experience double disadvantage: people with disabilities who are women, of non English-speaking backgrounds and are of Aboriginal and Torres Strait Island backgrounds. The study recognised the special needs and interests of these groups, whilst acknowledging individuality and the wide range of diversity within each group.

Women. Cooper (1993) argues that women with disabilities are not well protected through legislation in Australia. She argues that the Affirmative Action Act (1986), Sex Discrimination Act (SDA) (1984) and the Disability Discrimination Act (DDA) (1992) have many loopholes and exemptions which weaken their potency. The Australian Bureau of Statistics (1988) revealed that women with disabilities are more often institutionalised, less likely to work for money, less likely to own a house, and less likely to receive requested personal care and household assistance than equivalent males (Cooper, 1993). Issues for women with disabilities include isolation, low self esteem, reduced employment and other opportunities. These issues are compounded in remote and rural areas where only two options may be available for long-term care: family or institution. This situation places considerable pressure on the family to assume the role of primary care giver, despite the impact on lifestyle that this role imposes. Innovative programs are required which are creative and flexible in filling service gaps and which address issues associated with isolation, limited availability of service providers and supports. The whole family should be considered in design of rehabilitation and therapy programs. However, especially in the country it is a fact of life that women are responsible for most of the caregiving. Therefore, special consideration is required to the needs of these women who, particularly in remote areas have caring responsibilities which are over and above an already demanding daily routine.

> "I have an adult daughter who has severe brain injury and is extremely disabled. She is partially mobile and I have to care for all her needs. There are no services for her. What will happen to her when I die? (Parent, Dubbo)

People of non English-speaking backgrounds. To date, these people have largely been neglected in regard to policy for service provision in remote and rural areas. Human Rights Commissioner, Irene Moss (1993) noted that a Census of Disability Services undertaken in 1992 revealed that people of non English-speaking backgrounds were under-represented as users of mainstream services available for all people with disabilities (including vocational therapy, diversional therapy, training centres, nursing homes, residential and holiday accommodation, rehabilitation services and recreational centres). They experience difficulties in accessing services and in communicating with service providers. Such difficulties are compounded by having a disability (Ariotti, 1990). The sparse density of populations of NESB people outside major areas suggests that different models of service provision are appropriate. Attention should also be given to members of the deaf community who speak AUSLAN as well as hearing people who speak other than English as the preferred language at home.

People of Aboriginal and Torres Strait Island backgrounds. Very little reference material is available about the numbers of Aboriginal people with disabilities (McDougall, 1993). Results published to date from the 1988 Survey of Disability and Ageing conducted by the Australian Bureau of Statistics do not include Aboriginality. This information from the 1993 Survey of Disability, Ageing and Carers is not yet published. Most information is gathered by word of mouth by health care workers (Bostock, 1991). Thus, trying to determine the number of Aboriginal people with disabilities is impossible given the current level of information. However, a number of factors suggest that the Aboriginal population has a large percentage of people with substantial disability. Aboriginal populations experience a range of acute and chronic diseases not generally seen in other Australian populations (Rose, 1993). These reflect the geographic, occupational, social and economic contexts in which people live. Service provision for Aboriginal people has become a highly political and visible issue over the last few years. A great deal has been said about Aboriginal social and health status indicators and about the inadequacy of service provision for these people. Government organisations are beginning to develop policy and to implement strategies for addressing the severe disadvantage resulting from culturally-inappropriate services which have existed for many years. However, evidence emerging from this project indicates that few policy makers or service providers have fully come to grips with issues associated with effective service provision for Aboriginal people with disabilities (Tipper & Dovey, 1991). Issues in this area are highly complex and suggest that, if effective services are to be achieved, service providers must step aside from their long-held practices and orientations to take an open and innovative approach to planning and implementation (Eckermann et al, 1992).

Recent legislation demands marked changes in service provision for people with disabilities. Such legislation has provided the contextual framework for this document. Many of the strategies developed in this project will benefit people with disabilities in general, but it is essential that features of living in a remote or rural area are taken into account in planning and implementing new services. The issues emerging from this project are highly complex and multi-dimensional. They do not readily lend themselves to simple solutions or to a step-by-step strategy for addressing needs.

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INNOVATIVE MODELS OF CARE SUPPORT AND SERVICE DELIVERY

Sandy Kelly — Australia

I wish to speak to you about the ISSUES I have encountered in delivering services within remote and isolated North West Queensland, sometimes the forgotten part of our country.

The issues are -
- ISOLATION
- DISTANCE
- ACCEPTANCE
- NETWORKING
- RECESSION

North West Isolated Care is sponsored by the UNITING CHURCH FRONTIER SERVICES who have a history of working with people in Remote and Isolated areas.

The Commonwealth and State Governments' jointly fund North West Isolated Care under the umbrella of Home and Community Care [HACC] being a Community Options Project.

OUR AIMS ARE -

- to assist frail aged and younger people with a disability and their Carers, who do not have the availability of mainstream support services, to live at home
- to act on behalf of clients to ensure their individual needs are adequately met
- to develop special ways of assisting ISOLATED clients in Remote areas
- to work with other services and where possible provide extra resources

ISOLATION

The skies are vivid blue showing some heat haze. Is it going to be like yesterday 45 degree heat and not a breathe of wind? I hope not.

I arrived at the office to be greeted by mountains of paper work. The phone rings - our 008 number. A stressed Carer is on the line and needs my support after a dreadful weekend with her loved one. They are north of Nelia - 8 hours and 712 kilometres return trip from Mount Isa. This family has been ISOLATED and totally cut off from all essential services for one month by flood waters from the Flinders River due to the wet season. Some years they are totally ISOLATED for months at a time.

I would like to present to you a comparison of the area which North West Isolated Care covers [300 000 sq. km's] enabling you to affiliate with the vastness of this part of our country.

PHILIPPINES	RURAL NORTH WEST QUEENSLAND
Area 300 000 sq. km's	Area 300 000 sq. km's
Population 67,587,000	Population 18,000 [approx.]
3,829 people per 17 sq. km	1 person per 17 sq. km

N.B. The figures for North West Queensland exclude the townships of Normanton, Julia Creek, Cloncurry and Mount Isa. These communities have their own HOME and Community Care services [HACC]

These figures are a bit mind blowing, making us realise how lucky we are to be living in Australia. Another comparison within Australian shores is North West Isolated Care's area being one and one third times larger than our sister state, Victoria which covers an area of 220,000 sq. km's with a population of 4 million. In all of Australia there are only 126,000 rural holdings.

There was a message from Burketown, they are also cut off from flood waters due to the wet season. Our Service Provider who cooks and delivers Meals On Wheels to four clients had just been evacuated to Mount Isa Base Hospital by the Royal Flying Doctor Service - who is going to do the meals? Burketown is 8 to 10 hours away on some of the roughest roads in Queensland. Her husband said he would do them for a couple of days. I breathe a sigh of relief. I will visit her in hospital and arrange to do her washing as she knows no one in Mount Isa.

The total frustration of the ISOLATION from essential services has made me aware of the needs of people in remote areas. Working in the city for many years before coming to North West Isolated Care, I now realise how much we take for granted the services that are available to people in large towns and cities. Such services are lacking in the remote and ISOLATED areas.

Recently a gentleman suffered a major stroke resulting in speech impairment and also confining him to a wheelchair. His wife, the Carer was sent home from the city with insufficient back up programs. One can only assume that such services do not exist for ISOLATED people. Making a considerable amount of distant phone calls to collect printed information for my Carer, I also arrange to take the Speech Therapist out from Mount Isa to assess the situation and guide the Bush Nurse and myself in the right direction. The Speech Therapist could not believe the remoteness and ISOLATION of this family. She wondered! how they survive the heat , dust and flies and the opening and closing of numerous gates before arriving at their homestead On our way home we experienced four seasons in one, including a flash fierce storm with flood waters reaching the head lights Thank goodness for my 4 wheel drive The Speech Therapist was returned to the hospital, some 13 hours later! Her final words to me "Is this your typical day?" I could only reply "Yes"

People who choose to live and work in very ISOLATED and remote parts of this nation - a world very different to what most of us are used to, I feel ,are the pioneers and the backbone of our land

DISTANCE

Oh! What a beautiful sunrise – golden yellows, reds and purples The hills are sparkling in magic colours as the sun rises even higher - how lucky I am to view this wondrous sight I must watch out for the cows and camels on the road, as I am driving directly into the rising sun

As I travel the hundreds of kilometres of straight, boring tar roads, my mind ponders at what lies ahead of me due to the wet season The heat is extreme, insects and grasshoppers splatter all over the windscreen I spot the start of the dirt road, surrounded by flood waters – please GOD don't let me get bogged I engage in 4 WD – a very necessary feature of my vehicle enabling me to cover these vast DISTANCES and drive in safety

As I slip and slide along I do not see the rough, wet, boggy road but the beauty of the countryside and think of the wonderful people I have met and who have accepted me into their homes and lives giving me the strength and encouragement to continue on

Yes! I do get a little frightened of the unknown at times and very aware of the dangers of travelling alone in this very isolated and remote part of our country My HF radio and UHF radio are my only means of communication whilst on the road, giving me a sense of security

I arrive at the station The family of my young sight -impaired Client has prepared lovely fresh bread for me which they know I love, their hospitality and generosity overwhelming me

We leave after lunch as we are at least 4 1/2 hours driving DISTANCE from Mount Isa My Client requires frequent rest stops We are both looking forward to having tea in Cloncurry with our friends, the Flying Padre and his wife, enabling me to catch up on news on one of my Clients whom he had just recently visited My young client is very excited about talking to her friends at Special School tomorrow, continually chatting all the way back to Mount Isa

Arriving at Mount Isa at 10 pm tired and weary, after almost hitting some cows along the vast kilometres of unfenced road between here and Cloncurry, I drop my Client off to her Carer I say a silent prayer of thanks for this Guardian Angel who has opened up her home and heart to my Client and her family thus allowing the family some much needed respite from the continuous 24 hour care of their daughter

Later in the year I will be undertaking a "Needs Assessment" on services for Frail Aged and people with a Disability, covering the area of the "Top End" of North West Queensland to the Northern Territory Border past Hells Gate - the name says it all! Sitting at my desk I can pretend the DISTANCE isn't far, but in reality around 1800 km return trip and 4 days of travelling [a comparison would be a trip from Mount Isa to Brisbane] on some of the most dangerous and treacherous roads - better explained as goat tracks There may only be a need for one service within that area but that Client is entitled to live within their home environment for as long as possible and should not be discriminated against due to the isolation and remoteness of the area in which they choose to live

ACCEPTANCE

I remember ever so clearly my interview to the position being asked how I thought the Bush people would accept me especially as I am a little different in many ways particularly within my dress I thought a lot about it and decided to be myself and to be helpful in every way possible, not to be a hindrance and to try and slot into their daily routine

I have found the people I have been in contact with are rugged, self sufficient, individualistic, they struggle alone and certainly don't ask for charity. They have a dislike of Academics and Bureaucrats who pull "rank or power", preferring to use their own resourcefulness to do most things themselves eg

- Fix machinery and motors
- Run and manage properties - cattle / sheep
- Undertake the clerical side of running the property
- Educate their children within the home
- Have sound knowledge of First Aid
- Have a good understanding of Politics

These people are smart in an earthy fashion You must earn the right to be involved within their lives – once you have this ACCEPTANCE you are right

On approaching Julia Creek I think of my second visit to the district, stopping to buy a drink I passed an elderly gentleman sitting on a seat in front of the shop and he said "G'day Sandy – what are you doing back in town so soon" Well that certainly rocked me as I thought no one knew me On talking to him , I found I am very well known all over North West Queensland already Boy – that is a big worry! The bush telegraph travels really fast which I must remember – especially if I do something wrong

I have found the people who live in these remote and isolated areas now look on me as

- someone who really cares
- someone with whom they can be themselves
- someone with whom they can discuss private and personal matters and their confidentiality will be respected
- someone who will stay as long as required and who will return
- someone who understands the recession

Having lived in far Western New South Wales for twenty one years, I know what it is like to experience isolation, hardship, drought and lonliness and the value of such a service as North West Isolated Care

NETWORKING

When you work and travel on your own as I do, the importance of NETWORKING is my greatest survival tool

Some days I sit at my desk, with my head in hands and wonder how I am going to provide the much needed services when I am unable to find people to employ If I did not have a closeness with a large group of people and different services throughout the region, I would not survive It is the importance of NETWORKING that has made North West Isolated Care the success it is today

NETWORKING, whether it be with the Royal Flying Doctor Service, Bush Nurses, Director of Nursing within the Remote and Isolated Communities, Remote Area Family Services, Flying Padre, Aged Care Assessment Team, the team from Birdsville Hospital, or the Publican in some of the smallest places you couldn't imagine, this, is the only way we are able to co-ordinate services for our Clients

By NETWORKING we are able to obtain an understanding of people and their lives and are able to offer suggestions about what is available for them

They are unaware that we are their resource person and that we are constantly updating our information for them

It is important to listen to people who work in similar areas,accepting them for who and what they are, always respecting their rights and offering to be of assistance to them when possible

After driving through a large stretch of bulldust, I look over this very flat land as far as the eye can see. I notice a group of Kangaroos bounding across the plains disturbing a flock of Sulphur Crested Cockatoos who protest loudly. On arriving at the homestead exhausted and dusty after being on the road some 6 1/2 hours, I am greeted by the family with such love, warmth and caring, I forget all my worries. The younger member of the family is participating in Distance Education [School of the Air] so I pop in, in time to join her in the Fitness Class, thinking of the NETWORKING this organisation does on a daily basis – I realise they would not survive without it.

A beautiful lunch is prepared especially for me. I feel ever so humble and wished I had remembered to bring some flowers - next time! We sit and talk for hours about the situation of our two Clients, how the Carers feel and making the decision to find a full-time Carer. I stay overnight much to the joy of everyone. After tea we all sat down and worked on a plan to find a full-time Carer plus a relief Carer.

The following morning I leave early as I have a NETWORK meeting with the Director of Nursing of the local hospital at Julia Creek, as well as the Home and Community Care Co-Ordinator in the township of Julia Creek. Hopefully this will result in a solution to the problem.

It is 5 pm, travelling homeward bound I turn on the two way radio and listen intensely for Birdsville Hospital to come on air.

They are on air three times a day talking to whoever is on their frequency at that time. As I listen my mind wanders back to what it must have been like when John Flynn first set up the Inland Mission – now Frontier Service. His way of NETWORKING would have been so much harder and different from ours.

2QKT comes over the radio – that is me, it is now my turn to talk. We have a good chat, always respecting the laws of radio and I learn about some interesting people who will be in Mount Isa next week. I must follow them up. I hope they will be an addition to our NETWORKING list.

RECESSION

A phone call from our Liaison Officer in Boulia – some of our Service Providers have gone "walkabout" to Lake Nash in the Northern Territory. There is no one to take their place. I wonder how I am going to find people to come and work for North West Isolated Care. It appears people do not want to work in the remote and isolated stations and communities. I wonder why? I guess it is not every one's cup of tea to live and work in such isolation, where mail comes once a week, extreme heat, flies like you could not imagine, hundreds of kilometres from civilisation, hundreds of kilometres of flat ground. If only I could tell them the good points, the beauty, friendships, no hassles with traffic, excitement of new things. What is going to happen to the countryside when all the young people leave and go to the city to find employment? Remote communities are losing their essential services including banking facilities, loss of teachers, bus services, stores closing and Doctor's leaving. My ultimate concern is who is going to deliver the services to our Elderly Clients and Younger people with a Disability who choose to remain in their homes in this part of our country.

This would have to be the most frustrating of my issues and one I cannot find an answer to. I feel no matter how much money the Government will grant us, you cannot employ people if there are no people left within the area due to the RECESSION.

There is talk of the Special School in Mount Isa losing a teacher. If that happens, my young sight-impaired Client whom I mentioned earlier, will have restricted activities whilst being in Mount Isa for Respite. I get very annoyed with the Government and people who make these decisions - most not understanding what it is like out here and seemingly not caring.

Sometimes frustration at being unable to convey the compounded problems the RECESSION has caused these people, who are the backbone of the country and whom I have grown to love, reduces me to tears.

Transport costs make the cost of living in remote, isolated areas very unattractive to families. During the wet season all essential goods are flown into the isolated Communities and Stations, which escalates the price of goods eg. 2 litres of milk costs up to $5.75 – with circumstances like this, what is the incentive for people to live and work in remote and isolated areas of Australia?

Constantly declining numbers gives us the feeling of smallness and insignificance. Fewer people equal fewer potential Carers. Fewer people means strangers are noticed.

Occasionally I travel with the Royal Flying Doctor Service [R.F.D.S.]. They recognise that North West Isolated Care is a part of the overall health care team. Landing at Burke and Wills we are picked up by a Roadhouse owner and I introduce myself, thinking he did not know me. However to my surprise he remembered me from a brief stop I had made for fuel on my way to Normanton in the early days of my position. Recognising me as a stranger in the clearly marked Frontier Services vehicle, he decided to check me out. With fewer vehicles travelling, strangers are noticed. People come into the area and often only stay two years or less, making it hard for station owners to get help – cooks, ringers, home tutors etc. I have found many people are here one day and gone the next giving you a false sense of stability.

Back in my office I look out the window at the landscaped gardens and lawns. The sound of a water sprinkler distance the drone of passing traffic. I think about the people I have met, of places I have visited. The people have settled on the properties they call home. Exercising multi-skilled abilities they survive and will continue to survive. They are the proud pioneers of our Country. The remoteness, isolation and harshness of the land is part of them. The land and the people merge together and become one.

I would like to conclude my paper by sharing with you a beautiful but sad experience.

One of my clients passed away in her home on a remote station north of Julia Creek. I was asked by the family if I could attend the funeral which was to be held at the station. North West Isolated Care provided in-home respite / visiting, support / information and telephone support to the Client and her Carers.

The day was perfect, clear blue skies, a slight breeze blowing enabling the trees to whistle slightly. My client's coffin was standing under the pepper trees in the back yard of the homestead. People chatted and mingled freely. The Priest arrived and was greeted with great warmth by all present.

The service began followed by Communion where everyone was invited to participate. One of my Client's wishes was to be placed to rest under the clump of pepper trees in the adjoining homestead paddock. The owner of the property spoke briefly about the family, then turned towards the coffin saying "I am going to grant you your wish, you will be buried under the pepper trees".

Everyone followed the coffin to its final resting place accompanied by the gentle sounds of the 23rd Psalm, not saying a word but very much aware of the surroundings and the beauty of it all. As we were walking over the parched dry cracked earth, disturbing the grasshoppers, I noticed in the distance some horses starting to run and the cows standing very erect as if they were saying their final farewells.

Approaching the grave side, the winds picked up allowing the Pepper Trees to whistle even louder, creating a herald of song to this lovely lady.

After the final ceremony I walked over to the grave side to say my final good bye, placing some dirt and a flower into the grave, I paused to take in the beauty of the whole occasion. I thought how lucky I was to have shared in this very special time with this wonderful family and their friends and how North West Isolated Care had achieved its ultimate goal "of maintaining our clients within their home environment as long as possible". A wave of achievement passed over me knowing I had fulfilled this goal.

I love my job very much, feeling privileged beyond measure to have been the one selected to fill the role of Co-Ordinator for North West Isolated Care.

As I said earlier I am a practitioner working out in the field and what I have had to say reflects that I hope I have been able to give you a better understanding of the conditions and situations that face people who chose to work in remote and isolated areas within Australia

CONTRIBUTED PAPERS

GROWING OLD IN RURAL AUSTRALIA: HEALTH CARE IMPLICATIONS

David Battersby — Australia

ABSTRACT

Of Australia's population of around 17.4 million people, approximately 65 per cent live in capital cities and a further 20 per cent live in major centres outside these capital cities. This paper is concerned with the remaining two and a half million people, and in particular those older Australians, who live in rural and remote areas of the continent. The paper will begin with a demographic analysis of Australia's population highlighting the characteristics of the population of older adults who live in rural Australia. Attention will then focus on the marginalisation of older people in rural communities in Australia and the extent of disadvantage they experience in contrast with those who live in urban and metropolitan centres. To illustrate this, the paper will analyse and discuss the provision of health care for the aged in rural Australia identifying a number of issues including the lack of consensus about what level and mix of health and aged care services should be provided in rural communities; inequity in the distribution of health and aged care resources both to and amongst rural communities; and the difficulty of attracting and retaining health personnel in rural areas. The paper will conclude with an overview of the options for the reform of rural health care for the aged in Australia.

INTRODUCTION

Of Australia's population of around 17.4 million people, approximately 65 per cent live in capital cities and a further 20 per cent live in major centres outside these capital cities. This paper is concerned with the remaining two and a half million people, and in particular those older Australians, who live in rural and remote areas of the continent. The paper will begin with a demographic analysis of Australia's population highlighting the characteristics of the population of older adults who live in rural Australia. Attention will then focus on the marginalisation of older people in rural communities in Australia and the extent of disadvantage they experience in contrast with those who live in urban and metropolitan centres. To illustrate this, the paper will analyse and discuss the provision of health care for the aged in rural Australia identifying a number of issues including the lack of consensus about what level and mix of health and aged care services should be provided in rural communities; inequity in the distribution of health and aged care resources both to and amongst rural communities; and the difficulty of attracting and retaining health personnel in rural areas. The paper will conclude with an overview of the options for the reform of rural health care for the aged in Australia.

GROWING OLD IN RURAL AUSTRALIA

The difficulties of defining what is meant by "rural" in the context of the geography of Australia is now well documented (see, Dunn, 1989; Humphreys and Rolley, 1991). Indeed, Dunn (1989) asserts that there is simply no clear and unambiguous statement of the parameters by which "rural" is defined in the context of Australia. These difficulties aside, attempts have been made - mainly for administrative purposes - to differentiate between the urban, rural and remote areas of Australia. Most of these attempts (see, Faulkner and French, 1983; Nichol 1990; Arundell, 1991) have used a combination of population size, distance from major towns/services and calculations of population densities. For instance, the Australian Department of Primary Industries and Energy (1992) has developed a global map, based mainly on population densities, identifying the urban, rural and remote regions of Australia. While this is a simplistic representation it does convey the stark reality that Australia, with its population of approximately 17 million people, is not an urbanised country. The characteristics of the rural and remote areas of Australia have been summed up by Humphreys and Rolley (1991) as follows:

> [There is a] dominance of extensive landuses (notably agriculture and forestry); a dispersed settlement pattern containing small, lower order settlements and characterised by low population densities; a high proportion of the workforce in agricultural related employment; and a regional organisation of service provision. (p.20)

Using these categorisations of urban, rural and remote to describe the regions of Australia, it is possible to provide an analysis of the population base, highlighting the approximate proportion of older Australians (those 60 years of age and over) in each of these regions. This analysis is provided in the Table below.

Table 1: Urban, Rural and Remote Populations in Australia*

	URBAN	RURAL	REMOTE
Total Population	12,208,883	4,311,019	565,529
Population of People 60 years+	1,709,243	689,763	101,795
% of Population 60 years+	14	16	18

* *From: Department of Community Services and Health, Rural and Remote Classification, 1990*

It can be seen from Table One, that of Australia's current population of approximately 17 million people, 71 per cent live in urban areas, and many of these live in the capital cities. It is also apparent from Table One that the proportion of older Australians differs significantly across the regions of the country. This trend, which has now been confirmed in a number of studies (Dempsey, 1981, 1990; Calder and Wilson, 1987; Williams, 1991) highlights the fact that rural and remote communities in Australia have proportionately more older people than do the urban, metropolitan centres.

In more specific terms, the significant demographic trends characterising this sector of Australia's population can be summarised as follows:

- The numbers of persons aged 60 years and over living in rural and remote communities of Australia are expected to increase from around 800,000 in 1991 to 970,000 by 2021.
- The most rapid increases in the aged population in rural and remote areas will occur with those in the 75+ age group (e.g., the numbers have doubled during the last 12 years).
- By 2020, Australian men living in rural and remote areas can expect to live another 19 years after they reach the age of 60 and for Australian women this will be 27 years after their 60th birthday.
- Women in rural and remote communities will continue to outnumber men by nearly two to one among those over 80 years of age.
- Currently, about 75 per cent of men, but less than 50 per cent of women, residing in rural and remote areas are now married.

These trends parallel an equally significant structural change occurring in the Australian economy, particularly in the allocation of social welfare expenditure. Table Two provides details.

Table 2: Shifts in the Distribution of Australia's Social Welfare Expenditure

EDUCATION		HEALTH		PENSIONS	
1980	2040	1980	2040	1980	2041
31%	19%	25%	29%	29%	40%

It is clear from Table Two that social welfare expenditure in Australia is going to fall dramatically in education, rise several percentage points in health and increase more significantly in the area of pensions. One may infer from this that the savings obtained by decreasing expenditure in education are likely to fund increased expenditure in health and pensions over the coming decades, and that additional funding from other sources/savings will also be required to meet the shortfall in the area of pensions.

Overall, what can be concluded from the trends referred to above? First, it is inevitable that the proportion of Australia's population over 60 years, residing in rural and remote communities of the country, will continue to expand and that this will be most dramatic for those in the 75+ age group. Second, this expansion will place demands on the health care system and other forms of community and social support for older Australians. Third, the consequences of this ageing population will be determined by the political, social and economic circumstances that are available in the future and more particularly by the life experiences of the current generations of Australians. And fourth, older Australians living in rural and remote regions are likely to continue to be a heterogeneous group.

THE MARGINALISATION OF OLDER PEOPLE

There is an emerging literature (see, Cheers, 1987; Kellehear, 1988; Lawrence and Williams, 1990; Williams, 1991) which suggests not only rural disadvantage and impoverishment in comparison to urban populations, but that the impact of this is most severe on older Australians living in rural and remote regions. Perhaps the best example of this has been that provided by Dempsey (1981 and 1990) in his sociological studies of rural communities in Australia. His most recent study of a rural community of 4,000 people, for which he uses the pseudonym of Smalltown, graphically illustrates the type of marginalisation of older people which may be a common occurrence throughout other rural and remote communities in Australia. On the issue of income, for example, Dempsey (1991) reports:

> In Smalltown the standard of living of a majority of the elderly is substantially less than that of a majority of younger adults... About one third of Smalltown's elderly are on an income that allows them to get by rather than to participate fully in the social life of the community. (p.14)

Dempsey concludes that, in Smalltown, the decline in financial income that accompanies old age "increases the likelihood of many elderly being marginalised for it reduces self-sufficiency and impedes social participation" (p.14).

Dempsey also refers to the segregation and subordination of old age which he witnessed in Smalltown. This was particularly evident with those older people who lived alone in Smalltown, the majority of whom were women. With this group, institutionalisation became the ultimate marginalisation, since

> ... the ultimate price to be paid for failure to maintain oneself independently in the community is institutionalisation under the care of professionals of a different class and different generation.
>
> [Williams, 1990, p.3]

However, of all the factors identified in Dempsey's study that led to the marginalisation of older people, it was the issue of health that was most salient. As Dempsey (1990) points out: "Poor health marginalises the elderly both socially and psychologically. The elderly understand this well" (p.13). What, then, is the health status of older people living in rural and remote regions of Australia and what is the level of health care provision in these communities? In brief, the following trends are evident:

Health Status: While there is a general lack of data about the health status of older adults living in rural and remote communities of Australia (Dunn, 1990), broad trends are available which compare the health status of rural and urban Australians. Humphreys and Rolley (1990) summarise these trends indicating that the aged are over-represented in each case:

> Rural people experience significantly more illnesses and more hypertension and psychiatric disorders than do urban people ... [D]eath rates resulting from bronchitis and asthma were higher in rural than metropolitan areas. Rural areas also show higher levels of allergies and skin cancers and have higher levels of work related and motor vehicle accidents... [R]ural populations have poor health practices, with high levels of alcohol and tobacco consumption, exhibit a significant level of stress and a poor level of nutrition. (p.46)

Given these trends, it is not surprising that aged people are over-represented in the occupancy of beds in rural hospitals. Indeed, there is evidence that, in some instances, more than three-quarters of daily bed occupancy in some rural hospitals is by aged people unable to continue to live independently in their own homes (Humphreys and Rolley, 1991).

Health Provision: Health care provision in rural and remote regions of Australia is through services provided by both the public and private sectors. While there is considerable diversity in this provision across rural and remote communities, the delivery of health care usually operates through what Humphreys and Rolley (1991) refer to as a "patient-doctor-specialist-hospital referral system". They continue:

> Under this system, small and dispersed populations, remoteness, isolation, large distances and climatic extremes of rural Australia create problems for both providers and consumers of health care services. In terms of availability of services, numbers decrease and locations become more distant as one increases the degree of specialisation from the primary health care unit (the GP), which usually represents the first point of contact with the health care system. (p.52)

In Australia, there has traditionally been a clear rural-urban imbalance in the availability and access to health care services (Humphreys, 1988) and nowhere does this impact more than on aged people living in rural and remote communities. To illustrate this in further detail, reference can be made to a recently completed report released by Australia's National Health Strategy secretariat (see Reid and Solomon, 1992).

HEALTH CARE FOR THE AGED IN RURAL AUSTRALIA: A NATIONAL HEALTH STRATEGY

According to Reid and Solomon's report (1992) on ***Improving Australia's Rural Health and Aged Care Services*** "inequity of access" to health care, particularly for older people, is the major characteristic of health care provision in rural and remote communities of Australia. They continue:

> ... there are serious inequities in the allocation of public sector health resources between metropolitan/other major urban centres and rural communities. There is also a belief that, rather than converging, these inequities are worsening. (p.65)

Nowhere is this more apparent than in the variations of supply of General Practitioners (GPs) between urban, rural and remote regions of Australia. Previous studies (e.g., Ryan, 1972; Colditz and Elliot, 1978; Humphreys, 1985; Kamien and Buttfield, 1990) have also revealed a significant mal-distribution of medical personnel in Australia. This is evident in the most recent data which shows the following trends:

Table 3: GP Population Ratios in Australia*

	URBAN	RURAL	REMOTE
GP POPULATION RATIOS	1:732	1:1116	1:1055

* *From: Reid and Solomon, 1992.*

Similar trends also exist with the provision of other health personnel including community nurses, occupational therapists, physiotherapists and mental health workers. Added to this, Reid and Solomon (1992) point out that:

> There are virtually no practising specialists who live in smaller rural communities in Australia. GPs provide the bulk of clinical practice in small rural hospitals. (p.22)

This dearth of specialists is compounded by the absence of any firm agreements about the scope of clinical services provided by GPs and the tensions which sometimes exist between GPs and the nursing profession as "nurses endeavour to define the boundaries of their capabilities – boundaries which sometimes conflict with those of the GP" (Reid and Solomon, 1992, p.23).

In light of the evidence provided by Reid and Solomon, and the findings of past studies, it would seem that there is an emerging crisis in health care provision in rural and remote communities in Australia. Moreover, it would also seem apparent that, given the marginalisation of older people within many of these communities (Dempsey, 1981, 1990; Williams, 1991), the effects of this crisis are likely to impact most on them. Indeed, it could be inferred from the following findings of Reid and Solomon (1991, p.6) that the onset of such a crisis is imminent given:

- the lack of consensus about what level and mix of health care and aged care services should be provided in rural and remote regions of Australia;
- inequities in the distribution of health and aged care resources to, and within, rural and remote communities;
- inappropriateness of current health care funding arrangements for these communities;
- the ambiguity about the role and function of the small rural hospital in terms of providing residential care for older people and the level and mix of clinical services provided; and,
- the increasing difficulties of attracting and retaining GPs and other health personnel in rural and remote communities.

CONCLUSION: THE WAY FORWARD?

In contrast with older people living in urban regions of Australia, disadvantage and marginalisation seem to characterise an increasing number of the aged living in rural and remote regions. This paper has highlighted this in the context of health care, particularly in terms of health care provision in rural and remote communities. The root cause of this has often been laid at the foot of rural health policy, which according to Kamien and Buttfield (1990), has been predicated on a policy of urban health provision, despite its inherent limitations of application to rural and remote regions. How, then, can this impediment be overcome and what directions are being suggested for the provision of health care to meet the needs of older adults in rural and remote Australia?

The National Health Strategy in Australia has suggested five options. These are:

> *Option 1*: Maintain current funding regimes, but introduce flexibility and changes to existing health care provision suited to the needs of rural and remote communities.
>
> *Option 2*: Provide all rural and remote communities with a single pool of funding and allow these funds to be used flexibly for health care provision, community services, etc..
>
> *Option 3*: Provide selected rural and remote communities with a single pool of funding and allow these funds to be used flexibly for health care provision, community services, etc.
>
> *Option 4*: Create a single rural health program for Australia.
>
> *Option 5*: Create a multi-purpose service program (e.g., health, community service, etc.) for those rural and remote communities most disadvantaged.

Although the National Health Strategy's preferred policy is Option 5, there are two important, inter-related principles which underpin each option. First, there is the recognition that the health status of people, particularly the aged, living in rural and remote regions of Australia is significantly different from those residing in urban communities. Second, and as a corollary to this, health care provision in rural and remote regions must reflect and meet the needs of those people who live in these communities. The absence of these principles in rural health policy to date has not only contributed to the marginalisation of older Australians living in rural and remote regions, but has contributed to the crisis in health care provision in these regions. A commitment to these principles is the only way forward.

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RURAL CLINICAL PLACEMENTS IN THE HEALTH SCIENCES: A MULTIDISCIPLINARY PROJECT

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ABSTRACT

This paper will discuss a Charles Sturt University project, funded by RHSET, which is evaluating a "Multi-Disciplinary Rural Clinical Placement Service" for metropolitan Universities wishing to provide undergraduate students in the health sciences with a clinical placement in the Central Western and South Western Health Regions of New South Wales. The paper will detail the background to the project focussing on the current difficulties associated with the rural placement of students in the health sciences. The purposes of the project will then be outlined and include the establishment of:

(i) a centralised clearinghouse information system for the participating Universities via Email, AARNet and/or facsimile, detailing the availability of placements at clinical sites (e.g., in Hospitals, Community Health, etc.) for the particular disciplines, when the placements are available and the cost and availability of clinical supervision; and,

(ii) a "vacancy information bulletin" to the participating Universities via Email, AARNet and/or facsimile, listing job vacancies in the Central Western and South Western Health Regions of New South Wales which might be of interest to final year health science students at the participating Universities.

The paper will conclude by discussing the benefits of this Multi-Disciplinary Rural Clinical Placement Service which includes providing a co-ordinated, cost-effective and streamlined approach to rural clinical placements, easing the considerable burden on metropolitan Universities and rural health facilities in negotiating placements and identifying those health facilities and their staff which are willing to accept students on clinical placements.

INTRODUCTION

The recently released National Rural Health Strategy (1994) provides a bleak picture of the realities of being a health care worker in rural Australia:

Throughout many areas of rural Australia there is a shortage and maldistribution of health care providers, above-average population to health care provider ratios, high levels of health workforce turnover, and major problems of accessibility to services. (p.3)

The solutions, according to the authors of the Strategy document, are straightforward and include the following recommendations:

> Academic institutions need to be more responsive and innovative in meeting the education and training needs of rural health care providers ... A combination of rurally based programs ... in collaboration with metropolitan institutions is encouraged. A greater commitment to ensure that more training for all health care providers be made available in rural areas, including educational support in the form of training visits, would help to address rural health workforce needs. (p.18)

This paper will briefly outline a project which is being "responsive and innovative" in seeking to provide opportunities so that health care workers enrolled in educational programs at metropolitan Universities are able to undertake "training visits" and clinical placements in rural and remote regions. The project, known as the "Multidisciplinary Rural Clinical Placement Service", is specifically targeting metropolitan Universities wishing to provide undergraduate students in the health sciences with a clinical placement in the Central Western and South Western Health Regions of New South Wales. This paper will detail the background to, and purposes of, the project. The benefits of this Multidisciplinary Rural Clinical Placement Service will also be elaborated and include providing a co-ordinated, cost-effective and streamlined approach to rural clinical placements.

CLINICAL PLACEMENTS IN RURAL LOCATIONS

Currently, there are at least 10 Universities in Queensland, New South Wales and Victoria which make use of clinical placements in the Central Western and South Western Health regions of New South Wales. In the fields of Nursing, Occupational Therapy and Radiography these Universities are reporting that they are now experiencing significant problems in finding sufficient, suitable clinical placements in these particular regions as well as in other rural locations. Indeed, a recent report suggests that the situation is so serious that in the medium term metropolitan Universities will be forced to restrict severely or to discontinue their rural clinical experience (RHSET, 1993). The same report also indicates that the academic staff from these metropolitan Universities spend increasing amounts of time negotiating arrangements for rural clinical placements. Added to these problems, there is an emerging trend in many health facilities in rural locations to decrease the number of students they receive on clinical placement. A lowering of staffing levels and increased financial pressures on these health facilities are contributing factors; so too is the lack of a co-ordinated approach, on the part of the metropolitan Universities, to negotiating clinical placements in rural regions. It is not unusual, for instance, for up to six Universities at any one time to be negotiating for clinical placements in key health facilities (e.g., Base Hospitals) in the Central Western and South Western Health regions of New South Wales.

PROJECT OBJECTIVES

The aim of this project is to establish a Multidisciplinary Rural Clinical Placement Service for metropolitan Universities in Brisbane, Melbourne and in New South Wales who wish to provide undergraduate students, initially in the fields of Medical Radiation Science (Radiography), Nursing and Occupational Therapy, with a clinical placement in the Central Western and South Western Health Regions of New South Wales. In more detail, the three objectives of the project are to develop, trial and evaluate:

1. A centralised clearinghouse information system for participating Universities via Email, AARNet and/or facsimile, detailing the availability of placements at clinical sites in the Central Western and South Western Health Regions of NSW (e.g., in Hospitals, Community Health, etc.) for the particular disciplines (e.g., Nursing), when the placements are available (e.g., May and June) and the availability and cost of clinical supervision;
2. A placement service that will arrange, on behalf of the participating metropolitan Universities, clinical placements in the Central Western and South Western Health Regions of New South Wales and, if required, the dates of visits by staff from the metropolitan Universities (e.g., for clinical supervision/observation); and,
3. A "vacancy information bulletin" to the participating Universities via Email, AARNet and/or facsimile, listing job vacancies in the Central Western and South Western Health Regions of New South Wales which might be of interest to final year students in Radiography, Nursing and Occupational Therapy courses.

The strategies being adopted in fulfilling these objectives are detailed in Table 1.

Table 1: Project Objectives and Strategies

OBJECTIVES	STRATEGIES
To provide a centralised clearinghouse information system for participating Universities detailing the availability of placements at clinical sites in the Central Western and South Western Health regions of NSW (e.g., in Hospitals, Community Health, etc.) for the particular disciplines (e.g., Nursing), when the placements are available (e.g., May and June) and the cost and availability of clinical supervision.	(a) To establish protocols for involvement in the project for metropolitan Universities and for health care facilities in the selected region. (b) To establish Email/AARNet/facsimile links between Project Manager and clinical co-ordinators in the participating Universities. (c) To establish computer/facsimile links between Project manager and participating health care facilities in the Central Western and South Western health regions of NSW. (d) To develop an information protocol for each participating health care facility and university (e.g., placements available/ placements required; supervision available/supervision required; etc.).

To provide a placement service whereby CSU will arrange, on behalf of the participating metropolitan Universities, clinical placements in the Central Western and South Western Health Regions of New South Wales and, if required, the dates of visits by staff from the metropolitan Universities (e.g., for clinical supervision/observation).	(a) To utilise the established Email/AARNet and/or facsimile networks so that the Project Manager can transact the appropriate clinical placements and other services as required. (b) To provide written confirmation of transacted arrangements to the university and health care facility.
To provide a "vacancy information bulletin" to the participating Universities via Email, AARNet and/or facsimile, listing job vacancies in the Central Western and South Western Health Regions of New South Wales which might be of interest to final year students in Radiography, Nursing and Occupational Therapy courses.	(a) To develop a job vacancy protocol for participating health care facilities (e.g., job vacancy description; method of application; contact person; etc.). (b) To utilise the established Email/AARNet and/or facsimile networks to convey "vacancy information bulletin" to clinical co-ordinators in participating Universities.

Initial software program specifications have been developed for the project and these involve the use of Microsoft Access as the database package. Most of the data for initial entry onto, and for updating, the database will occur electronically via Email. However, where Email is not available (which is the case in a number of clinical facilities), data will either be sent by fax where it can be manually entered or by courier on floppy disk.

The protocols for operating the database have been developed and are being trialled. These protocols include procedures for:

- Entering new and updating existing clinical placement data
- Sending error messages to clinical placement sites
- Matching students with available placements
- Adding to and updating University data
- Adding to and updating student data
- Adding to and updating staff data
- Outputting a placement report
- Adding to and updating employment vacancies
- Notifying Universities of employment vacancies

The following exemplifies two of these protocols.

Matching students with available placements. To match students with available placements, select option #2 (Maintain Placement Data) from the main menu. Then select option #1 (Match Placements) where the designated screen will appear. The system will attempt to match students with placements according to preference, discipline, year and sex. It is possible to override inappropriate placements simply by entering a new student number in the student allocated field of each placement. A student cannot be allocated to two placements. The system will send an error message to the screen if this occurs. When such an error occurs, the user must delete the student from one of the placements before allocating him/her to a new placement.

Adding and updating employment vacancies. To add to, or to update, employment vacancy data, select option #3 (Maintain Employment Data) from the main menu. Then select option #1 (Update Employment Vacancies) where the designated screen will appear. The user can then enter the details of the vacancy or the vacancy number. Press <ENTER> once this is completed. If the vacancy is already on record its details will be displayed in the remaining data entry fields where the user may use the <TAB> or <SHIFT> + <TAB> keys to locate the field to be changed and then type in the new data. If no data appears, the vacancy is new and the user will <TAB> through the data entry fields entering the new vacancy data. The system will allocate a new ID number to all new vacancies. When a new vacancy has been entered the user will click on <DONE> to exit data entry/update.

The final outcome measures to be used in this project are detailed in Table 2.

Table 2: Outcome Measures

PROJECT OBJECTIVES	FINAL OUTCOME MEASURES
1. A centralised clearinghouse information system for participating Universities via Email, AARNet and/or facsimile, detailing the availability of placements (e.g., in Occupational Therapy) at clinical sites in the Central and South Western Health Regions of NSW, when the placements are available and the cost and availability of clinical supervision.	• No. of participating Universities and health facilities; • Reported difficulties with utilisation of Email, AARNet and facsimile information systems; and, • Reported difficulties with establishing a centralised clearinghouse information system.
2. A placement service whereby CSU will arrange, on behalf of the participating metropolitan Universities, clinical placements in the Central and South Western Health Regions of NSW and, if required, the dates of visits by staff from the metropolitan Universities.	• No. of student placements in Nursing, Radiography and Occupational Therapy; • No. of associated services provided and requested (e.g., clinical supervision visits by university staff); and, • Reported difficulties with clinical placements.
3. A "vacancy information bulletin" to the participating Universities via Email, AARNet and/or facsimile, listing job vacancies in the Central and South Western Health Regions of NSW which might be of interest to final year students in Radiography, Nursing and Occupational Therapy.	• No. of health facilities listing job vacancies in the "vacancy information bulletin"; • No. of job vacancies listed; and, • Reported interest from final year students in the "vacancy information bulletin".

BENEFITS AND POTENTIAL OF THE PLACEMENT SERVICE

Currently, there is the capacity to place a total of more than 2,000 students (in Nursing, Occupational Therapy and Radiography), from metropolitan Universities, in the 180 health facilities able to receive students (e.g., Hospitals, Community Health, Radiography practices, etc.) in the Central Western and South Western regions of New South Wales during the period of an academic year. However, what this project has uncovered to date has been an underutilisation of some of these facilities brought about by a number of factors including disillusionment and discontent with past students on clinical placement and lack of co-ordination and liaison by Universities in the implementation of their various clinical placement systems. Interestingly, some facilities are also reporting problems with increased utilisation by Universities and have threatened to withdraw their services if the competition for places between Universities and the resultant demands on clinical staff to place students are not eased.

The piloting of this Multidisciplinary Rural Clinical Placement Service will provide a co-ordinated, cost-effective and streamlined approach to rural clinical placements, ease the considerable burden on metropolitan Universities and rural health facilities in negotiating placements, identify those health facilities and their staff who are willing to accept students on clinical placements and to provide a vacancy information service for final year students who may wish to work in rural health facilities.

It is proposed that, should the project be adjudged feasible, then a cost per student per clinical placement could be levied on participating metropolitan Universities so that the Multidisciplinary Rural Clinical Placement Service can be sustained on a cost-recovery basis during 1995 and beyond. There could be a two-tiered cost structure: a basic cost for arranging the clinical placement of students; and, supplementary costs for arranging clinical supervision, dates of clinical observation visits by staff from the metropolitan Universities, follow-up on students with problems on clinical placement, etc.. A preliminary estimate suggests that the basic cost per student per clinical placement will probably be in the range of $20 to $40

There is also the possibility, depending on the outcomes of the Project's evaluation, that the Multidisciplinary Rural Clinical Placement Service could be extended to include the placement of students from disciplines such as Speech Pathology, Physiotherapy and perhaps Medicine.

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FARM INJURIES AND PREVENTION RESEARCH: NEW ZEALAND

Ruth M. Houghton and Anthony G. Wilson — New Zealand

ABSTRACT

The New Zealand Accident Rehabilitation and Compensation Insurance Corporation and the New Zealand Ministry of Agriculture and Fisheries have funded major research projects into the incidence and prevention of farm injury in New Zealand. In 1992 the Ministry of Agriculture and Fisheries funded a survey of farms and in early 1993 ACC funded a three year programme of community oriented research and prevention of injuries on farms. Both of these projects will be described.

There are over 80,000 farms in New Zealand. Most are owned and operated by individuals or families. Farming is the only major business in the country in which workers and their families live at the place of business. Family members often provide unpaid labour. Increasingly, more farm work is being done by family members and the number of permanent paid employees on farms is decreasing. Because of the high risk nature of farming, and the number of people involved the rural communities including farm families as well as farmers and farm workers and visitors are at risk of injury on farms. In addition children living on farms face special risks. Over a decade (1979-1988) children were 10% of all farm fatalities.

The research activities completed to date include an epidemiological analysis, literature reviews and an on farm survey of all residents and workers on a sample of farms in selected regions. This on farm survey has been designed to identify awareness of safety issues and record injury experiences and safety knowledge among farm residents and workers.

The next stage of the research later in 1994 is the development of injury prevention programmes which will be trialled in the study regions. Community and industry groups are being consulted throughout the study.

FARM INJURY PREVENTION STUDY PROGRAM 1993–1995

The New Zealand Accident Rehabilitation and Compensation Insurance Corporation (ACC) has funded a three year farm injury prevention study programme to be completed from 1993 through 1995 based at the University of Otago, Dunedin, New Zealand. The programme and some preliminary findings from that research are described here.

SAFETY OR FARMS

The programme is based on a research and action model as presented by Cryer and Ehrman (1989). Farming is a major New Zealand industry and is a priority for injury prevention because of the ongoing human and financial costs incurred. Although there has been a major decline in farm fatalities from 1969 to 1986, primarily due to a reduction in tractor related fatalities associated with the introduction of legislation requiring roll over protection, the need for injury prevention activity remains and is highlighted by New Zealand and other observers (Cryer and Fleming 1989, Grammeno 1989, Murphy 1981, Schafer and Kotrlik 1986).

The rural population of New Zealand contains a majority of the workers in high risk industries which include forestry, mining, fishing and aviation along with farming.

A summary of claims to the ACC for 1990 (Table 1.1) indicates that farming and forestry (usually reported together) have a high claim rate of 72 per 1000 for males. Farming has a rate of 53 per 1000 and forestry is 82 per 1000, substantially higher than the average of all work injury claims of 41 per 1000. Farming and forestry together with mining, fishing and aviation are the industries with the highest injury rates in New Zealand.

Table 1.1 Work Injuries by Occupation (1989/9o)*

Occupation	Injury rate per 1000		Fatality rate per 100,000	
	male	female	male	female
Professional/technical	15	16	9	2
Administration/manager	10	8	3	0
Clerical	18	12	5	0
Sales	12	11	5	0
Service	50	26	8	0
Agriculture/forestry	72	32	22	3
Production/transport	78	38	16	2
Total (male+female)	41		8	

* *Accident Compensation Corporation 1991, ACC Injury Statistics. Vol 1,91*

The major role of farming in New Zealand economy and rural society is of interest to a number of community and farm industry groups. Development of the research programme was based on a review of research and statistics, a survey funded by the Ministry of Agriculture and Fisheries (Houghton and Wilson 1992) and consultation with Women's Division of Federated Farmers, Federated Farmers of New Zealand, New Zealand Federation of Young Farmers Clubs, Royal New Zealand Plunket Society, Occupational Safety and Health Division of the Labour Department, health practitioners and others.

Because farm residents live where they work and all members of a farm family are exposed to potential injury in the farm environment, a community oriented programme was proposed in which research, dissemination of research findings to interest groups and the rural community and development, testing and evaluation of interventions are integral.

OBJECTIVES OF THE PROGRAM

The aim of the research programme is to produce information and develop and test interventions which will assist in decreasing the incidence of serious and fatal injury on farms in New Zealand.

Specific objectives of the research include:

- A description of the epidemiology of the injury occurring to farmers and farm workers and their families on the farm and in the course of farm work off site
- Literature review of published and unpublished sources regarding injury patterns, communication channels in rural communities that affect farm residents, international and local experiences of interventions
- Identification of major channels of communication in rural communities that affect farm residents and safety practices

- Interviews of national and regional representatives to identify channels of influence
- Interviews of farm residents including full time farmers, family and permanent full time workers on a sample of farms in three regions which represents the national farm profile to identify awareness of safety issues, injury experience and safety knowledge
- Identification of barriers to farm safety activities for families as well as farmers and workers
- Identify interventions for pilot development in the study regions
- Identify established channels of communication which can be used to test these interventions
- Maintain communication with the key community and industry groups of the research programme through consultation and dissemination of research findings

The programme has three stages

Stage 1 includes epidemiological analysis, a literature review and a national farming community network study. Stage 2 is on farm surveys involving residents and workers on over 150 farms in three regions. The final stage, Stage 3, is the development and testing of injury prevention programmes in study regions. The epidemiological research, literature reviews, social and community network analysis have identified injury experiences of full time farmers, permanently employed farm workers, and families resident on farms

Channels of communication within rural communities and sources of information that influence farm residents have been identified

During the research projects discussion of potential interventions and strategies to implement these have continued within the research team. Dissemination of the research findings as well as consultation with interest groups nationally and in the local communities of the study regions are activities which contribute to development of interventions and strategies. A major objective of the programme framework is to continue to combine research with the potential outcomes of this research and action model.

Intervention development will be based on the networks established during the research phases. This is consistent with the PRECEDE-PROCEED model (Green & Kreuter 1991) which research confirms can be effective if built on a base of community ownership of problems and solutions, uses careful planning, sound theory and good data, and incorporates local experience within an organisational plan

The PROCEED framework provides specific steps for developing interventions and initialising the implementation and evaluation process. This approach is consistent with other modern health promotion strategies (Ashton 1991) and has proved itself robust in a range of organisational settings

PRELIMINARY EPIDEMIOLOGICAL FINDINGS

Analysis of injury to farmers and injuries occurring on farms in New Zealand has been conducted. Forthcoming papers will be available by members of the University of Otago Injury Prevention Research Unit directed by Dr John Langley. Some findings are summarised below for injuries that occurred on farms

Injuries that resulted in stays in hospital in 1989 (N = 1377) are summarised in Table 2.1 below

Table 2.1 1989 Injuries on Farms Resulting in Hospital Stays*

	Number	% of Injuries
Motor vehicle crashes (incl 2-,3-and 4-wheel bikes)	278	20
Animal incidents (incl horses)	407	30
Farm machinery incidents (incl tractors)	199	14
Falls (not involving animals)	132	10
Hand Tools (incl chainsaws, axes etc)	69	5
Trees/logs	48	3
AllOthers	244	18

* *Preliminary analysis, Farm Injury Prevention Study*

- Incidents involving motor cycles (including 3- or 4-wheel bikes, known as all terrain vehicles (ATVs) and horses were the most common – together they made up 36% of all incidents resulting in hospitalisation
- Those injured in incidents involving horses were younger than those injured in other types of accidents, and were more likely to be women
- Of the animal incidents, those involving horses were the most common, but the majority of injuries to farmers involved incidents with sheep
- In 90 of the machinery incidents, tractors were involved (and tractor injuries appear to be more severe, involving longer hospital stays than other injuries). Deaths resulting from incidents on farms show that between 1979 and 1988 67 children under the age of 15 years died as the result of incidents on farms (18% of all deaths) and 56 people aged 60 years and over died (15%)

REVIEW OF THE LITERATURE

The review of New Zealand and international literature sources conducted by DrCarol Slappendel and Mr Ian Laird of Massey University (Palmerston North, New Zealand) will be reported in detail in papers now being prepared. That review and the epidemiological analysis indicate that tractor use continues to be hazardous and many injuries are associated with animals. Intervention programmes from the United States, Canada, Sweden and Australia are described with the latter the most relevant to New Zealand practice. Community based programmes and collection and analysis of injury data at a local level are important components of intervention practice

BACKGROUND :
NEW ZEALAND FARMING AND EMPLOYMENT

Farm Types

There are four main types of livestock farming in New Zealand, sheep, beef, dairy and other/mixed including deer, pigs, goats etc

In addition, cropping and a variety of horticultural activities are undertaken. The number, total land area and average size of New Zealand farms by type is shown in Table 2.1 below

Table 2.1 Types of Farming Activity in New Zealand: 1990*

Predominant activity	Farm Units	Total land area in use		Average size	
	Number	%	ha	%	ha
Sheep farming	21785	27.5%	9797633	62.0%	450
Beef farming	11694	14.8%	2021824	12.8%	173
Dairy farming	16858	21.3%	1572904	10.0%	93
Mixed/other livestock	9582	12.1%	1468780	9.3%	153
Cropping	1728	2.2%	223967	1.4%	130
Horticulture	9266	11.7%	214346	1.4%	23
Other/idle land	8246	10.4%	497003	3.1%	52
Total	79159	100.0%	15796457	100.0%	200

* *Agriculture 1990, Department of Statistics*

- Sheep farms account for slightly more than one quarter of all farm units but occupy 62% of farm land
- Dairy farms account for over 20% of farm units but only 10% of farm land

- Horticulture accounts for 12% of farm units but only 1% of farm land

Trends in farming show that over the past decade the number of farms has increased

During the past decade the average farm size has decreased by 22% (to 216 hectares). This is because the type of farming undertaken in New Zealand is changing (there are more dairying and horticultural farms and fewer sheep farms) and there are more small farms whose owners are not full-time farmers

In 1990, 51% of all farms in New Zealand were 'significant' farms - and they produced 95% of the total agricultural output.

The proportion of 'small' farms – those with an annual estimated agricultural output of less than $42,000 gross – has been increasing by 1991 almost half (49%) of the farms in New Zealand were 'small' and produced 5% of the total agricultural output.

Operators of small farms are most likely to earn most of their income from sheep/beef (50% of sheep/beef farms are small), horticulture (49%) or 'other animal' farming (63%). Only 14% of dairy farmers and 37% of crop growers are small farmers - possibly because the high cost of the plant and equipment needed for these activities makes them less economic to undertake on a small scale.

FARM EMPLOYMENT

New Zealand farms have traditionally been owned by individual farmers and their families rather than by corporate bodies. Individuals and families are also the key participants in the farming activity. Corporate farming or business investment in farming tends to be concentrated in only a few farming types, notably horticulture and dairying with less than 10% of farm units in 1990 owned by companies rather than partnership or individuals.

The farm workforce is highly complex with a mixture of owners ("working owners, leaseholders, sharemilkers" as grouped in the standard Department of Statistics reports). Most farm activity is carried out by owners (working owners, leaseholders or sharemilkers); this group is over half of the 170,000 people employed on farms in New Zealand.

In addition to owners the next largest group of employees is the permanent [paid] workers which are one-fifth of the workforce. The other major group of workers is unpaid family members which are also one-fifth of the population employed on farms. In addition there are casual workers with the numbers fluctuating seasonally.

- Owners are 58% of the permanent workforce
- Permanent paid workers are 20% of the permanent workforce
- Unpaid family members are 22% of the permanent workforce
- Casual workers fluctuate in number

A large proportion, two thirds, of unpaid family workers are women. Women are also one-half of the part time workers and one-third of the owners.

- Women are 67% of the unpaid family workers.

The proportion of working owners, leaseholders, sharemilkers who are part time is 29%.

The population employed on New Zealand Farms at June 1990 and February 1991 is outlined in Tables 2.2 and 2.3 below.

2.2 Farm Employment June 1990, February 1991'

	Working Owners Leaseholders & Sharemilkers	Unpaid Members of Family	Permanent Paid Workers	Sub total Workforce	Casual/ Seasonal Workers
June 90	87203	36352	26960	150515	9928
Feb 91	88639	31872	29663	147924	24325

* *Department of Statistics*

2.3 Farm Employment by Sex February 1991 *

		Working Owners Leaseholders & Sharemilkers	Unpaid Members of Family	Permanent Paid Workers	Casual Workers
Male	Fulltime	47129	5001	19655	14721
	PartTime	12866	10144	3421	
Female	Full Time	14540	5434	3655	9604
	PartTime	11854	11293	2932	

* *Department of Statistics (includes forest plantation workers, est 6000)*

Farm employment and operational features which are important to consider include:

- The trend in the past decade has been an increase in unpaid family and decrease in paid permanent and casual farm workers. The number of female working owners/leaseholders/sharemilkers has increased as has the use of contractors.
- An increase in the number of farms in New Zealand and decrease in farm size. More farm units are dairy and horticulture units and fewer sheep farms. There are also more small "lifestyle" farms whose owners are not employed as full-time farmers.
- There is also an increase in the proportion of 'small' farms as noted above.

This trend to small farms has several implications relating to safety:

- It is believed that small farm operators may be less likely to belong to established farm networks – such as Federated Farmers - which are the traditional ways farmers receive and exchange information about farm issues and management, including safety.
- Small farmers are more likely to work the farm tasks on a part-time basis and so they may be less experienced in operating farm machinery.
- Because of their relatively low incomes, small farmers may be more likely to use machinery that is older or not as well maintained - and therefore not as safe – as that used by farmers of large properties.
- And it is more difficult to account for all the injury and fatal incidents that occur on farms, because small farmers are less likely to identify themselves as 'farmers' – so they are less likely to show up in official statistics relating to the incidence of farm-related injuries and fatalities.

1992 SURVEY FARMER AND FARM WORKER HEALTH AND SAFETY

Introduction

A postal survey of 3000 New Zealand "significant farms" conducted in February 1992 was based on a Statistics Department sample of farms selected in proportion to farm types and regional distributions (Houghton and Wilson, 1992). (This survey was funded by the Ministry of Agriculture and Fisheries, Rural Resources Unit).

Questionnaires were returned by owners or managers of 1323 farms (47% of the final sample of 2843 valid addresses) and 997 other farm employees totaling 2320 responses.

The survey was farm-based and did not include other agricultural services workers such as spraying or fencing contractors who may be temporarily employed on farms.

Most respondents were male and married. Half worked 40 to 60 hours a week while one-third worked 60 or more hours. More than half the respondents to the survey were younger than 45 years.

General Health

One-fifth of respondents have had to stop work due to general illness over the last 12 months. Most short term illness was flu. Most illnesses lasted less than one week but one-fifth of those ill had their work routines affected for over a month.

Skin cancer had been diagnosed for 9% of respondents. Most cases were face head/neck and arms/hands. Surgery was the treatment in most cases (61%) while one-third (37%) received liquid nitrogen treatment and one-tenth (11%) radiotherapy. A small number (3%) reported that they had no treatment.

Allergies affected 29% of respondents and one-tenth of those with allergies reported their farming routine was affected by allergies. The most common allergies were hay fever (63%), skin rashes (25%) and asthma (22%).

Chemical Use

- 8% of respondents reported that they think their health has been affected by chemicals they have used on their farm in the last 12 months. Herbicides were the most commonly reported chemicals suspected by the respondents of having affected their health.
- Inhalation (36%) or absorption through the skin (29%) were the most common methods of accidental intake reported in the survey.

One eighth (13%) of respondents who suspected their illness was due to chemicals received medical treatment (primarily from general practitioners) and one-quarter of affected respondents reported they were unable to continue their normal work routine.

The chemicals that respondents reported they most commonly used were fertilisers (91% of farms), herbicides (88%) or dips and drenches (81%). Oil products, paints and disinfectants were used on three-quarters of farms and pesticides on two-thirds. Chemicals respondents most commonly suspected of affecting their health were herbicides (43% of those farmers affected), dips and drenches (17%) and pesticides (15%). One-quarter of respondents who suspected their health had been affected by chemicals reported that they normally wear no protective clothing when using chemicals. Close to half protected the trunk, legs/feet, arms/hands. Few (14%) wore eye protection. Chemicals were stored primarily in the main shed (59%). The garage (18%) and house (6%) were also storage areas. Two-thirds of respondents said none of the areas where chemicals were stored were locked.

Use of Farm Machinery and Vehicles

- One-tenth of respondents had been injured within the last 12 months while using farm machinery and vehicles.
- Half of those injured had had their work routine affected by the injury.
- 44% of injuries were associated with farm bikes (2 or 3-4 wheel).

Most respondents operated tractors (93%), chain saws (84%) and workshop equipment (74%) while half used 3-4 wheel bikes (57%) or 2-wheel farm bikes (48%).

Machinery injuries had been experienced in the last 12 months by 11% of respondents to the survey. A high proportion of injuries (42%) were associated with 2-wheel or 3-4 wheel bikes while tractors or implements pulled by tractors were involved in nearly one fifth (18%) of accidents.

In half of the cases of injury (54%), farm work routine was affected and respondents lost time from work.

More than half of the injured respondents (56%) had received medical treatment. The majority of injuries were bruises (39%) or cuts (37%). Sprains occurred in 20% of cases and fractures or broken bones in 9% of cases.

Working with Farm Animals

- Animals (primarily cattle) caused injury to one-fifth of respondents within the last 12 months.

Animals have caused injury to one-fifth (22%) of respondents. Half of these injuries were associated with cattle. Injuries were primarily bruises (59%), sprains (25%) and cuts (25%).

Over one-third of respondents (38%) injured and 8% of all respondents had their work routine affected by the injury. One-third of those injured (36%) received medical treatment.

Back injuries

- Half of the respondents reported experiencing back pain within the last 12 months and over one-third of these had had their work routine affected by back pain.

Over one-third of those with back pain (40%) had had their work routine affected and over one-third (42%) had sought medical treatment. One-half (47%) of those with back pain had received prolonged treatment.

PRELIMINARY FINDINGS :
1994 ON FARM PERSONAL INTERVIEW SURVEY

The Farm injury Prevention Study Programme - Stage 2

The on farm personal interview survey funded by ACC as part of the Farm Injury Prevention Study Programme was started in October 1993. Interviews were conducted from October 1993 through March 1994. Farms were randomly selected for personal interview within farm types and region so as to be representative of the national farm profile. (Tables 4 1 below).

Table 4.1 National Farm ProfileInterviews Planned and Conducted

	National Profile*		Interviews	
FarmType	n	%	Planned	Actual
Dairy	16757	26	39	43
Sheep	20358	32	48	53
Beef	13383	21	31	26
Cropping	1766	3	4	5
Horticulture	8364	13	20	19
Mixed	3378	5	8	14
Total	64006	100	150	160

* *Agriculture Statistics, 1991; excludes deer, pigs, goats and other, (14506 units) and plantations (1927 units)*

The local farm interviews used three types of questionnaires which were developed by consultation and reading (such as Brown 1993, Houghton & Wilson 1992, Rodgers 1993 and Wolfenden et al 1992).:

- a general farm questionnaire which described the farm, the people associated with the farm, types of machinery and features or practices on the farm
- a personal questionnaire for each adult (over age 15) about their farming activities, community ties and information sources about injury prevention;
- children's questionnaire for or about each child to describe farming activities and community ties.

Eight local residents were trained and conducted interviews in their areas. The method used by interviewers was to personally delivery survey questionnaires to farms and brief one or all occupants/workers. Then questionnaires were completed with or by the interviewer with a few questionnaires completed later and returned in a free post envelope.

Farm Residents and Employment

A total of 495 adults and 260 children on 160 farms are represented by the survey. Two thirds of surveyed farms had school aged or preschool children living on them. One third of surveyed farms had only adults living on them or, in the case of four farms, had no permanent residents living on them (ie, the farmers did not live on the farm itself).

All the farms surveyed employed at least one full-time worker (working owner or permanent paid farm worker), with the majority of farms surveyed (82%) worked by individuals or families with a financial interest in the farm or its stock (ie, working owners, sharemilkers or leaseholders). Twenty eight of the surveyed farms were managed by paid farm workers with the remaining 132 managed by full-time working owners, sharemilkers or leaseholders.

- 43% of the surveyed farms were worked by one full-time male working owner who may or may not have been assisted by part-time or unpaid family members or by paid farm workers.
- 21% of surveyed farms were worked by one male and one female working owner.
- On average, 1.7 working owners worked full-time on each of the surveyed farms along with 0.7 part-time working owners.
- Employment by paid farm workers was more likely to be full-time than part time with an average of 1.1 full-time paid workers per farm compared with an average of 0.2 part-time paid farm workers.
- Relatively few family members are reported to work unpaid on the farm – an average of only 0.1 full-time unpaid family member per farm and 0.2 part-time unpaid family member per farm.

Casual workers had been employed on over two thirds of surveyed farms in theprevious 12 months.

Table 4.2 Employment of Casual Workers on Surveyed Farms in Previous 12 months

Type of Farm	No. Farms	Workers	%	Average
Dairy	42	30	71	1.6
Sheep	52	41	79	5.0
Beef	26	22	85	2.7
Cropping	5	1	20	0.2
Horticulture	19	17	89	19.2
Mixed/other	14	12	86	16.8
Total	158	123	78	6.3

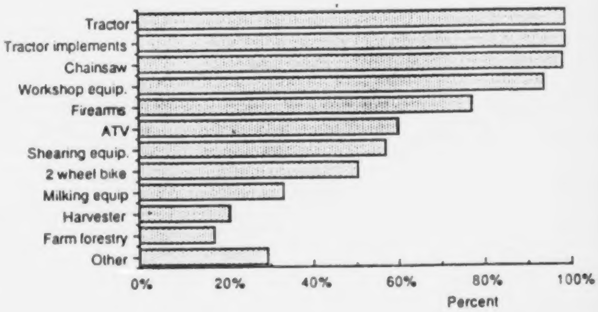
Contractors had been engaged to undertake work on 91% of the surveyed farms in the last 12 months. Contractors were most commonly used for shearing and earthworks (both used on 44% of farms surveyed), silage wrapping (23%), silviculture and hay making (both 22%) and fencing and applying fertiliser (both 18%).

Machinery, Physical Features and Safety Practices on Farms

Some of the potential hazards found on the surveyed farms including equipment and machinery used and physical features of the farms and the extent to which a selection of potential safety features and practices are present or observed on the farms are described below.

The frequency with which a selection of common farm equipment is used by permanent and casual workers (but not contractors) on the surveyed farms is illustrated in Figure 4.1.

Figure 4.1 Equipment Used on Farms

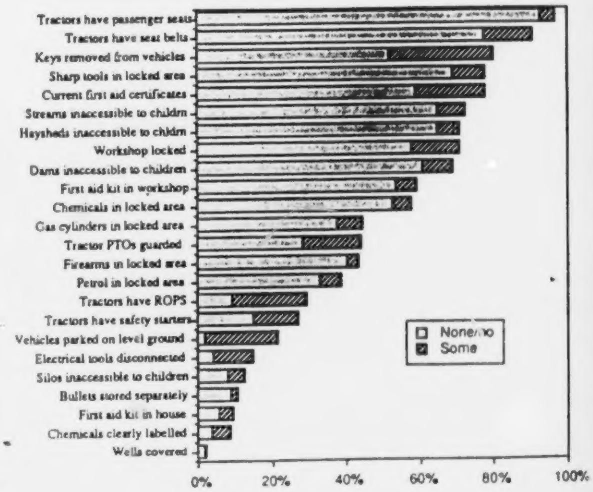


- Some items of equipment (ie, chainsaws, tractors, tractor implements and workshop equipment) are used by permanent and casual workers on virtually all farms.
- Firearms are widely used on the surveyed farms (77% of farms), as are ATVs (60%) and shearing equipment (57%).
- Two wheel motorcycles are used on half the surveyed farms (51%).
- Milking equipment (33%), harvesters (21%) and farm forestry equipment (17%) are less commonly used.
- As with machinery use, there are some physical features that are found on almost all the surveyed farms. Over 90% of farms contained implement sheds, garages and workshops.
- Over 80% of surveyed farms had haysheds, chemical storage areas, and dams or ponds and over three quarters of farms contained rivers/streams.
- About 60% of farms had high voltage overhead power lines and wool sheds.
- Around 40% of farms had wells and forest plantations while about one quarter had stables and one fifth had silos.

Safety Features and Practices

Safety features or practices present or observed on the farms surveyed are illustrated in Figure 4.2 below.

Figure 4.2 Safety Features and Practices



Most of the above features can be viewed as applying mainly to children and relate to access to potential hazards on the farm.

Water hazards: Most farms (74% of those surveyed) have streams or rivers running through them and, due to the need to allow stock access to drinking water, these are almost always accessible to children. 69% of farms also contained dams or ponds which were accessible to children although only three surveyed farms contained uncovered wells.

Storage areas: Storage areas on the farm are commonly accessible to children - farm workshops and haysheds were accessible to children on 71% of the surveyed farms. Other storage areas at least sometimes accessible included chemicals storage areas (58% of farms) and silos (13% of farms). Most farms (91%) report that chemicals are always clearly labelled.

Equipment: Farm equipment is seldom locked away. On 69% of farms sharp tools are reportedly never stored in locked areas when not in use. Similarly, on 37% of farms gas cylinders are not stored in locked areas and on 33% of farms petrol is not stored in locked areas. Electrical tools are usually disconnected when not in use (85% of farms).

Firearms: As Figure 4.1 illustrates, firearms are used by permanent of casual workers on most farms (77%). However, on 43% of the farms surveyed at least some of these firearms are not stored in locked areas. In addition, on 11% of the farms bullets are not stored separately from the firearms.

Vehicles: Vehicles are usually parked on level ground (78% of farms reported they were always parked on level ground when not in use) but keys are commonly left in vehicles (on only 20% of farms were keys always removed from vehicles when not in use).

Tractors: On 30% of the surveyed farms at least some tractors did not have roll over protection structures (ROPS). Similarly on 44% of the farms at least some tractors did not have guarded power take offs (PTOs) and on 78% none of the tractors had seat belts. No information was gathered on the extent to which seat belts were worn on those tractors which had them.

First Aid: Most farms (90%) had a first aid kit in the house but only 40% had a first aid kit in the workshop. Fewer than half the farms (41%) had at least one household member with a current first aid certificate.

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OCCUPATIONAL HAZARDS ENCOUNTERED BY AGRICULTURAL WORKERS OR AGRICULTURAL OCCUPATIONAL HEALTH AND SAFETY THE LOST OPPORTUNITY

John Schneider – Australia

INTRODUCTION

Although the number of people who indulge in agricultural work in the developed world has fallen due to increasing mechanisation, automation, and the use of chemical and biological preparations, agriculture still accounts for the employment of more than 50% of the worlds working population. Large numbers of the world's population, particularly in the third world, are involved in subsistence farming practices and a large number of undeveloped countries rely on agriculture as a prime source of foreign exchange.

Agriculture incorporates the science, art, and business of cultivating the soil for the production of crops and raising of livestock, to provide foodstuffs and raw materials for manufacturing industries. It is involved in the planting, production, harvesting, processing, as well as a significant amount of research and development associated with these activities. Because of the broad diversity of agriculture, workers are often exposed to a large number of varying hazards arising out of activities' one does not necessarily associate with agriculture, eg chemical handling, construction, transport and manufacturing.

In Australia in 1989-90 approximately 125,000 full time and 40,000 part time farms were operated by, according to the Bureau of Statistics, 416,000 workers, about 5.4% of the national workforce. Of those directly engaged in agriculture only about 150,000 were wage and salary earners while the remainder were members of family partnerships, owner operators or unpaid family helpers. Because of this, worker's compensation statistics, which are only available for employees, greatly underestimate agricultural workplace injury and sickness rates. This position is reflected in the situation that for the years 1982-84 a total of 257(223 adults and 34 children) farm related fatalities were identified, a striking over-representation of death in farm workers.

Worksafe Australia information for 1986-87 estimates the workplace occupational injury incidence rate for agriculture, forestry, and hunting to be 47 per 1,000 workers (compared with 32 per 1,000 workers for all injuries). Using NSW worker's compensation data as an indicator ($27 million for the year ended 1987) it is suggested that the annual cost of injuries could be up to $400 million. If this is a reasonable guesstimate then it is a significant cost in an area that is often neglected and generally poorly managed in this industry.

The following is a summary of various hazards, environmental, biological, and technological to which agricultural workers may be exposed together with some recommendations for consideration. It should be noted that this summary is not complete.

ENVIRONMENTAL HAZARDS

Topographical Hazards

Agriculture is practiced in a wide range of geographical locations because of varying factors including location of available land, fertility of the soil, suitable pastures, and availability of water, etc. There are often a number of hazards attributable to these situations -

1. Mountains and hilly terrain - This exposes workers and their families to the risk of landslides as well as considerable difficulty and problems derived from working on steep slopes.
2. Volcanic Regions Problems associated with steep terrain and the ever present danger of earthquake and eruption.
3. Swamps, Wetlands and Floodplains - Problems associated with flooding and waterborne disease.
4. Aquaculture and Fishing - Problems associated with isolation and the marine environment.
5. Forests and Jungles - Problems associated with indigenous flora and fauna, disease and fire.
6. Arid Regions - Drought, erosion and extremes of temperature.
7. Altitude - Problems associated with the reduced oxygen availability of the atmosphere.

Points to be considered in these situations include the use of appropriate farming practices and equipment purpose-built for the location in which it is to be used. The population involved should be aware of the dangers of living and working in inhospitable locations and there should be government organised contingency and disaster plans to be available for dealing with cases of emergency caused by natural disasters. Often a conscious decision must be made whether the rewards of practicing agriculture in these locations are worth the risks involved and the cost required in providing relief services.

Agricultural practices are often carried out in isolated rural areas where the availability of services is poor. These may include power, water, medical assistance, and sanitation. In some areas the pastures or fields are situated some distance from the villages or towns. Because of work practices in these areas travel to and from work is often undertaken at night that may lead to additional hazards. Economic isolation can occur as agricultural workers in a number of countries are composed of either peasant or subsistence populations that may be forced to live in squalid conditions with increased mortality and morbidity due to lack of health services addressing the problems of disease, malnutrition, and occupational and other accidents.

Improved education and other facilities can sometimes rectify these problems but the solutions often require political intervention.

Climatic Hazards

1. Agricultural work is frequently performed outdoors where workers are often directly exposed to harsh climatic conditions, including extremes of temperature, humidity and wind.
2. Dramatic natural climatic disasters, such as drought, thunder or dust storm, blizzard, and flood associated with monsoonal rain can all expose agricultural workers to either direct dangerous situations or indirect pressures through destruction of shelter, local infrastructure, food supply, or livelihood.
3. The work is often seasonal, with varying activities reliant on suitable weather, eg often pressures associated with a rush to plant or harvest crops while climatic conditions are favourable. This may increase the likelihood of accidents as often an unskilled seasonal labour force is subject to pressures of time while working in these situations.
4. Agricultural activity often requires good visibility and for this reason is often carried out during the daylight hours. This situation may frequently expose workers to long periods of strenuous physical exertion during the heat of the day.

These conditions can sometimes be combated by the provision of adequate fluid and caloric intake to enable the workers to maintain their health and productivity. Suitable protective clothing and workstations are also required to avoid stresses caused by heat, cold, humidity, sun, and rain. Climatic conditions also often influence the use of suitable protective clothing, which may prove too uncomfortable for practical use, particularly in tropical latitudes. Provision of suitable shelter close to the workplace is also necessary, eg a shady tree or an air-conditioned tractor cab. There should be adequate supervision and monitoring of the health of the labour force by either public health officials or private services, for example those attached to plantations or manufacturing plants, etc. Regional disaster and relief plans should be prepared in areas where the risk of natural disaster is high.

NON IONISING RADIATION

VISIBLE LIGHT

Prolonged exposure especially associated with dry and dusty conditions produces an increased incidence of pterygia in rural workers. Appropriate eye protection can reduce this risk as it does radiation damage to worker's eyes from welding flash. Laser radiation that may be used in surveying applications in land preparation is also capable of producing tissue damage through localised heating of tissues.

INFRARED RADIATION

This non visible radiation can cause similar problems. Appropriate training and warnings can assist in limiting unnecessary exposure.

ULTRA-VIOLET RADIATION

This is by far the most significant form of radiation causing medical problems in agriculture, particularly in tropical and sub-tropical regions in the form of solar keratoses, malignant skin tumours, and cataract. The incidence of these conditions may be reduced by using appropriate protection, eg clothing, shelter, sunscreens and sun glasses.

PHYSICAL HAZARDS

Temperature

Exposure to extremes of temperature can often be associated with conditions in the workplace as well as climatic variation. Thermal stress, dehydration and other heat exposure effects can occur for example in the enclosed cockpit of a crop dusting aircraft or in boiler or furnace attendants working in power generating plants associated with agricultural processing, etc. Heat stress can occur at lower temperatures when work is performed in humid environments as for example experienced by greenhouse workers. Cold exposure which occurs to those employed in refrigerated cold storage areas may cause loss of sensation and significant degrees of tissue ischaemia or even necrosis particularly of digits, especially in those with compromised peripheral circulation.

Water

Working in wet situations may significantly increase the risk of slips and falls and can be particularly hazardous if electrically powered appliances are in use. Wet conditions associated with wind or draughts may reduce skin temperature and exacerbate the effects of low ambient temperature. Steam generated during cooking and processing operations may cause thermal burns as well as increasing workplace humidity. Wet conditions also favour the growth of several biohazards notably pathogenic bacteria and fungi.

Most of these situations can be modified with the use of appropriate personal protective equipment. Consideration must be made in the design and construction of these workplaces for maximising thermal comfort and providing emergency exits where workers are subjected to extreme thermal stress eg coldrooms. Suitable work practices can also contribute to reduced fatigue, dehydration, and psychological stress.

Fire & Explosion

Bushfire may present a threat to property, stock, or rural workers themselves and may also be associated with crop fires. These may arise as a result of deliberate controlled burning (gone wrong) or other factors (eg sugar cane fires). Combustible chemicals eg gases, petrol, oils, etc require suitable handling and storage procedures. Smoke containing noxious gasses, incomplete combustion products, and other particulates may also cause illness and incapacity.

Explosives are used in land clearing, construction and demolition. Explosions may result from incorrect use and storage of volatile liquid fuels, etc. Stored grains and other dust producing agricultural substances may also contribute to explosion hazards. Firearms, frequently employed in rural situations for the control of pests and slaughtering of stock, also contribute to accidental and unfortunately intentional injury or death.

Control of these particular hazards requires a trained and educated population with a system of fire wardens appointed for the monitoring and recording of fire outbreaks and a well trained and equipped professional or voluntary fire brigade.

Ionising Radiation

Some exposure to this may occur to those involved in the preparation and processing of some agricultural products.

Dust & Other Atmospheric Contaminants

Inorganic dust generated by ploughing and tilling operations or associated with wind erosion may cause health problems or contribute to accidents by effecting visibility. Significant dust levels may also be produced during the application of trace elements and other chemicals.

Organic dust may arise from both animal and vegetable material. This may include allergens or other biologically active materials from sources such as poultry sheds, dairies, or piggeries, etc. This may be responsible for eye, ear, nose, or throat irritation, allergic reactions or in some situations hypersensitivity pneumonitis.

Toxic gasses can be produced from a number of sources. Ammonia and methane may both be generated during the decomposition of animal waste. Carbon dioxide and carbon monoxide may be produced as exhaust gasses from combustion engines that should be suitably ventilated if being used in confined spaces. Hazardous gasses may be generated or used as pesticides in the storage of various products eg nitrogen dioxide in association with siloed grain. Other gasses may be used as fuel (eg LPG and methane) or may be used in the artificial ripening or preserving of farm produce. Welding is a common undertaking in the maintenance and fabrication of agricultural implements and exposes the welder to a number of noxious metal fumes which may cause metal fume fever or a number of other health effects.

Suitable engineering design is required to reduce or eliminate the production of dust in agricultural processes. There should be incorporated into these designs suitable ventilation or extraction equipment. If possible the worker should be isolated from processes involving toxic atmospheric contaminants and where this is not possible then personal protective equipment in the form of respirators or other breathing apparatus may be required if environmental monitoring indicates that health risks are still present. The monitoring of harmful physiological effects by lung function testing should be considered if impaired lung function and consequent reduced productivity and physical well being are to be avoided.

Pressure & Pressure Systems

Direct pressure to hands from tools will produce the characteristic callosities commonly associated with manual workers, while poorly designed tools may be associated with direct nervous system effects such as paraesthesia.

Pressure systems include cylinders, boilers (vessels associated with power generation and the processing of produce) and hydraulic lines containing fluid under pressure and compressed air associated with processing and maintenance procedures. These systems require design to appropriate specifications and the inclusion of safety and monitoring systems within the manufacturing process. They require regular maintenance and operation with by suitably trained personnel.

Noise & Vibration

Noise is associated with the operation of machinery involved in agriculture, and the use of firearms and explosives. Exposure may cause either temporary or permanent hearing impairment. Lower levels of nuisance noise can cause impairment of concentration and thereby also increase the likelihood of accidents. An attempt should be made to design out the sources of noise, eg by using quieter machinery or if this is unsatisfactory then isolation of workers from the noise source by use of enclosed control cabins or enclosure of machinery. Use of suitable attenuation devices, eg earmuffs and other personal protective equipment is recommended if all else fails. An attempt should be made to implement hearing conservation programmes which include education of the workforce, identification of affected workers and identification and isolation of noise sources.

Operation of vibrating equipment eg chainsaws, power tools, and steering wheels may produce various problems associated with circulation and the nervous system, particularly in the upper limb (eg. Raynaud's, vibration white finger, and carpal tunnel syndrome). Fatigue, impaired vision and balance, and acceleration of degenerative conditions such as joint disease may also occur. Back pain can be precipitated or exacerbated by vertical vibration of the spinal column associated especially with inadequate vehicular suspension and seating.

Efforts should be made to dampen these vibrations and where possible prevent them from occurring by providing adequate design and maintenance of machinery.

BIOLOGICAL HAZARDS

Animals

Increased contact with both domestic and wild animals occurs in the rural environment. Injury can be caused by animal attack, eg domestic cattle, snakebite, or falls from horses. Exposure to animal material can induce allergic reactions in those susceptible, ranging from hay fever through occupational asthma to anaphylaxis.

Insects

Contact may produce allergic reactions eg bee stings, occupational asthma from exposure to grain and dust mites, or systemic poisoning from spider bites, etc. Dermatitis may arise from contact with caustic chemicals produced by various insects, particularly beetles and these conditions often acquire quite colourful or descriptive aetiology eg. the "acid beetle" or the "Finch Hatton bug". Other insects may act as vectors or disease eg mosquitoes, ticks, fleas, and lice.

Microbial Infections

These may be acquired directly from the environment or be transmitted to man from an animal host as is the case with the zoonoses. There are a multitude of organisms both anerobic and aerobic bacteria, parasites, viruses, and ricketsia with a wide range of pathogenicity.

Bacterial infections can occur by contact with contaminated substances (eg Staphylococcal and Streptococcal infections) or in association with animal bites etc (Pasteurella multocida, Streptobacillus moniliformis from dog and rat bites respectively). Arthropod borne viral illnesses include Dengue fever, River fever, Ross River virus, all spread by mosquitos, and Lyme disease by ticks. Other diseases generally regarded as more common in a rural environment include:- tetanus, toxoplasmosis, guiardiasis, cutaneous lava migrans, and several fungal skin diseases.

Again controls by education, vaccination, practise of adequate standards of personal and environmental hygiene can help in reducing these hazards. Adequate processing of animal products by pasteurisation and cooking etc, and control of animal vectors such as mosquitoes, fly, and fleas reduce the chance of serious infection and morbidity. Adequate first aid and medical back up should be available to prevent or treat infectious complications of animal bites and other forms of trauma.

The. incidence and prevalence of the zoonoses are difficult to determine because of misdiagnosis, they are often mild, and there is significant lack of awareness and diagnostic support. Fortunately their mortality is low although their morbidity can be quite high. Several of these diseases, particularly those identified in domesticated animals, have been have been reported in agricultural workers (eg. Cattle:- Leptospirosis, 0-fever, Brucellosis and Bovine TB; Pigs:- Brucellosis, Swine Influenza; Sheep:- Hydatid Disease, Ort, Myiasis; Poultry:- Histoplasmosis, Newcastle Disease, Psittacosis). Many of these however, also have as hosts either native or feral hosts that may greatly increase the number of rural dwellers exposed to these diseases. Contamination of field harvested and consumed food and water sources by both domestic and wild animals, and the field slaughtering of stock and game for personal consumption, may spread other zoonotic diseases not directly related to occupation to both rural workers and their families eg. fascioliasis, giardiasis, hydatid disease, sparganosis, tape and round worm infections.

The zoonoses may be controlled by education of both those exposed to, and those identifying them, as well as the isolation of, and prompt veterinary attention to sick animals. Slaughtering and butchering should be carried out in a hygienic manner. Control of the sources of transmission eg. vectors, dust, etc should also be considered Vaccination may be appropriate where this is available eg. 0-fever, Leptospirosis.

TECHNOLOGICAL HAZARDS

Buildings and Construction

- Buildings themselves can be of inferior construction, particularly outbuildings which are often erected by untrained workers with insufficient supervision. Hazards can also be associated with these activities eg falls from the roofs of barns and silos, slips and other construction type accidents and illnesses. Fires and explosions in stores, etc may sometimes be attributable to inadequate building standards and design.

Mechanical Handling and Loading

This often involves untrained brute strength and not infrequently results in some form of injury. Many loading aids eg lifts, hoists, cranes, and conveyors are in use in agriculture and these present potential sources of injury to often inadequately trained rural workers.

Transport

Problems may arise in association with the transport of produce by motor vehicles, railway, aircraft, or seagoing vessels. These resources are often privately owned by large landholders, co-operatives, or they may be operated by government agencies on behalf of the agricultural industry and as such rural workers have minimal control over hazard management. These workers can of course influence accident occurrence when they are involved in loading or operating activities. The area of maintenance and operation of private farm transportation is responsible for a significant amount of morbidity and occupational fatality in this country, particularly resulting from motor vehicle accidents.

Agricultural Machinery

These implements may be used for tillage, planting, cultivation, harvesting and chemical application. Hazards associated with all these mechanical devices (often heavy, sharp and moving, with either crushing, cutting or rotating parts) can include:-

1. Trauma (cuts, burns, electrocution, fractures, amputations) associated with falls from or into, contact with moving parts, collision with machinery, flying objects projected from the machine.
2. Biological injury because machinery is oftern contaminated with soil, faecal material, chemicals and micro-organisms, infection may oftern occur.
3. Physical hazards from noise, and vibration, etc.
4. Toxic Substances may be present in the form of various chemicals eg exhaust gasses, lubrication oils, fuel, and grease, etc.
5. Maintenance Problems associated with working on heavy, awkward or moving equipment.
6. Operational Hazards these may be increased in instances where machinery is used at night using artificial light and at speed. There are often a large variety of small machines reqiured which are often self-maintained, poorly guarded, badly installed and operated by unskilled workers.

Control and monitoring of these procedures can be by the application and policing of minimum standards of safety and ma9intenance. Improved ergonomic and safety design will also assist in the prevention of injury eg. the elimination of catching and trapping points, installation of warning alarms, improved access for maintenance and operation, attention to visiblility, and the use of safety devices such as guards, interlocks, roll cages, non-slip surfaces and handrails.

Electrical Hazards

Electrical Appliances

Handtools, milking machinery, shearing equipment and other electrically powered devices may present a hazard to those using them. Adequate design, maintenance and safe operating practices assist in controlling the risk of accidents occurring.

Lightening Strikes

Because of frequent outdoor activity, workers must be aware of this problem and have adequate training in, and access to first aid and medical treatment if necessary.

Power Supply

Protection from faulty circuitry can b3e provided by a combination of a variety of electrical protective contrivances including fuses, circuit breakers, earthing, and earth leakage devices. Power lines themselves can present a serious problem to pilots involved in crop dusting, or drivers of cranes or harvesting equipment with long headers, aerials or other projections. Operators must be aware of the location of these hazards before commencing work.

Chemical Hazards

There is an increasing direct occupational exposure to a wide variety of chemical substances, particularly resulting from progressing research into farming methods. Exposure can occur to a wide variety and number of chemical substances either independently or in combination with other chemicals. Where this occurs the effects may be either independent, additive, synergistic, or antagonistic.

Pesticides

These may be used for the control of insects, rodents, nematodes, funguses, weeds and viruses and bacteria associated with non-animal hosts. Some of the individual chemicals fall into the following categories:

Inorganic and Organic Metallic compounds
Organochlorins
Organophosphates & Carbamates
Organo Nitrogen Compounds
Chlorophenols and Nitrophenols
Halocarbons
Sulphuryls
Anti-coagulants and other poisons, etc.

Antibiotics and other Veterinary Chemicals

Defoliants and Hormones

These are used to accelerate, retard or alter growth in some way.

Fertilisers

Ripening Agents and Preservatives

Paints, Dyes and Adhesives

Caustics, Cleaning Agents and Solvents

Fuels

These are many and varied and include gas, coal, petrol, distillate, etc.

Incidental Exposure to Other Substances

These are also many and varied and encompass botanical substances eg sap, combustion products produced by firs and cigarette smoke, gasses derived from decaying materials eg methane, nitrogen dioxide, and contaminants of useful chemicals eg dioxin.

Risk assessment should alert workers to the likelihood of hazardous chemical exposure and the types of symptoms to expect in the case of harmful exposure. Any person exhibiting these symptoms should be assumed to have been exposed until proven otherwise and the appropriate first aid measures instituted if necessary. Monitoring can be carried out of either the enviroment or of biological materials taken from the worker eg blood, urine, etc.

Methods of control include:

1. Increasing research into
   a) Specificity — The development of chemicals (particularly pesticided) with increasing specificity as this decreases the toxic effect on non-target areas.
   b) Biodegradability — This may provide a solution to the problems arising from persistence in the environment.
   c) Synergism — as exposure to many chemicals may occur at times and little is known of the effects produced when chemicals are mixed.
2. Engineering Control

This can reduce or even prevent contact with chemicals by improving the means of ventilation, mixing and application.

3. Government Regulation

   This may allow some control of the types of chemicals produced, imported, and marketed. It can also place restrictions on the availability, packaging, storage, and transport of dangerous substances.

4. Improved Attitudes and Education

   There needs to be some encouragement for agricultural workers to seek expert advice including obtaining information from manufacturers, distributors and the reading of labels. It must be remembered that in some countries, including Australia there is a significant degree of illiteracy among the rural population.

5. Improved Work Practices

   This should include the correct use of personal protective equipment.

CONCLUSIONS

It must be noted that a large number of occupational hazards encountered by agricultural workers can be related to their social conditions and in many instances their control is out of of the hands of these individuals. Also contributing to less tha n ideal management of occupational health and safety issues is:

1. Lack of knowledge of the possible problems or the skills to perform effective hazard identification and risk management and a lack of available and affordable resources to provide the appropriate advice and education.
2. There is often only on the job training by unskilled or poorly trained advisers with much information passed from one generation to the next perpetuating outdated practices.
3. Lack of suitably trained, readily available consultants with suitable expertise and experience in the problems encountered in providing effective occupational health services in remote or isolated workplaces.
4. The conservative nature of rural workers means that there is often a reluctance to accept new techniques particularly if accepted practices seem to work.
5. The "she'll be right" attitude of many self employed who are happy to leave things alone when there is no perceived problem. Preventative maintenance of plant and equipment is still poorly managed in many smaller businesses. The labour force is an asset of the business and will benefit from effective preventative maintenance like any other asset.
6. Workers are often unskilled or semi-skilled and the work is seasonal allowing no continuity of employment and limited opportunity for developing diverse skills and updating knowledge.
7. The declining infuluence of the unions in agricultural industries that has been caused by diminishing numbers of rural wage earners who are bing replaced by family labourers. The unions have generally pushed for improvements in workers' healthe and safety on humanitarian grounds.
8. Many family members are often involved in farming practices with women and children assisting in tasks for which they are not physically suited.
9. Financial constraints and ppor incomes often limit the ability to spend money on additional labour. Because of this the working day is often extremely long. Farmers are unable to afford up-to-date, well-maintained equipment, and expert technical advice.
10. Poor working conditions including long hours, few breaks, no holidays, and poor incomes all contribute to increased psychological stress.
11. There is to a large degree a reliance on outside factors eg commodity prices, natural phenomena, etc. All tend to produce increased physical and psychological stress.

Many of these factors are beyond the control or insurmountable for the individual farmer and agricultural worker. They must encourage and expect their industry organisations to provide a loud voice in lobbying for, and providing innovative occupational health and safety services to their members which other workers have come to expect as a part of their employment. A strong lead in providing expert technical advice particularly in the area of occupational health and safety should by near the top of the list.

Agribusiness is big business economically but organisationally is very much a coalition of small businesses. In Australia it is still dominated and managed by small family units and small partnerships with the assistance of casual labour or small workforce its management processes are still very much based on cottage industry. Agriculture is one of the oldest forms of human pursuit and while much research and development have taken place in the area of product development and production little has been done in the area of human resource management (particularly occupational health and safety) to increase productivity.

Thanks to U.S. cultural expansionism Asia is rapidly becoming westernised and as their standard of living increases the consumer market for western commodities and foodstuffs should grow rapidly. Australia is well placed to take advantage of this market and will maxomise the gbenefits if its industry is both efficiently and effectively managed. occupational health and safety have been sadly neglected in the past and this has cost the industry dearly in both dollar terms and lost productivity. It is unlikely that individuals and small partnerships, that make up the bulk of the industry, will be able to make a significant contribution to productivity improvements. The lead should come from industry groups and the government who have until now been more interested in setting minimum standards for ensuring the health and wellbeing of the worker and not particularly interested in the improving the efficiency of the industry.

In an industry as geographically isolated as agriculture health and safety loss control by government regulation has proved ineffective and it appears likely that the Robins style of control by self regulation will follow suit. The factor most likely to succeed is probably good old fashioned capitalism and the realisation that good occupational health and safety practice pays in dollar terms by reducing cost, increasing productivity and therefore increasing profitability. The problem lies in convincing management that by spending $10 they will make $11. Individual costing of occupational health is probably the only answer. Large national, international, and multinational companies have, and not just for humanitarian reasons, identified and reaped the benefits of effective occupational health and safety management. The agricultural industry in Australia could benefit considerably by improving its viability and productivity by more effectively managing this neglected area of lost profitabiltiy. It is amazing that more effective occupational health and safety management, which benefits everyone in the long run, has not been persued with more enthusiasm.

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RURAL AND REMOTE ALLIED HEALTH PROFESSIONALS: IS DISTANCE EDUCATION A VIABLE OPTION FOR POSTGRADUATE STUDY ?

Lorraine Sheppard — Australia

ABSTRACT

Rural and remote area allied health professionals have felt disadvantaged when they compare themselves to their city counterparts. Their career opportunities, access to continuing education and peer group support seem sadly lacking. City based continuing education courses may be inappropriate for these professionals who have a different role of the specialist generalist. Continuing education and peer group support therefore must be tailored to their needs.

Method

A qualitative survey was undertaken involving 20 in depth interviews throughout South Australia and the Northern Territory. The quantitative survey which followed involved a mailed questionnaire forwarded to physiotherapists in South Australia (100) and Northern Territory (70). A reply envelope was included to increase the response rate. A second mailout was completed to non-respondents to maximise the response rate. A response rate of 70% or 119 questionnaires was achieved.

Participants were asked questions about themselves, their educational background, professional training, work description and continuing education needs. For the purposes of this paper the continuing education needs will be briefly described.

Results and Discussion

The needs of rural and remote area physiotherapists include clinical skill development and are not common to other allied health professions. Any offering of continuing education programs need to cater for the specialist generalists providing a broad range of clinical skills and skills to implement preventative health programs. Two distance education subjects were trialed as a response to these needs and their evaluation showed it successful and viable for physiotherapists postgraduate education.

The Graduate Certificate in Physiotherapy is proposed which aims to increase clinical skills of the specialist generalist but recognises there are still special needs of individuals working in unique environments. Self directed clinical studies are an alternative to catering for these individuals.

Distance education methodologies with the facilities of a distance education centre support this approach whilst increasing access and participation for the professionals. Ultimately this will assist in providing health care for rural and remote area Australians.

INTRODUCTION

The situation of community expectations and needs of rural and remote area allied health professionals differs from their city counterparts. For example, career opportunities within the rural and remote area service are limited as is access to continuing education and peer group support. In addition, their role is more diverse than that of city counterparts as they are called upon to provide expert knowledge over a wider range of areas. This makes them a specialist-generalist, someone who needs to be a specialist for their clients, as this specialisation is across many areas they are also being a generalist.

The matter of community expectation of the role of rural and remote area allied health professionals has led to differences in educational needs. Clearly continuing education needs to be broadly based across specialisations and delivered in ways which allows access and is supportive of the circumstances of rural and remote area service workers.

This paper aims to introduce research about the professional educational needs of rural and remote area physiotherapists in South Australia and the Northern Territory. In a response to these needs a trial and evaluation of two post graduate distance education subjects in relation to their suitability in meeting these needs is discussed. Finally, a Graduate Certificate in Physiotherapy (Rural and Remote Area Studies) will be presented as one possible solution to these dilemmas.

PROFESSIONAL NEEDS OF ALLIED HEALTH PROFESSIONALS

Initial documentation of the needs of rural health workers has been undertaken (Blue et al., 1992; Harris, 1992 and Rosenmann, 1992). In particular, problems of professional isolation, lack of career development, lack of locum relief and increased travelling time to attend courses have been identified. Allied health education needs vary from professional clinical development to management and interpersonal skills courses. Overall the highest priority for further skill development is for eprocedures of a trade or professioni (Harris, 1992). The subjects for clinical skills given priority are care of the elderly, infant and child health, primary health care, health counselling, women's health and community development. A survey by the South Australian Health Commission (SAHC) and the Australian Physiotherapy Association (APA) South Australian Branch survey reinforces these findings, placing particular emphasis on rehabilitation care for the elderly, updates on recent orthopaedic procedures and establishing prevention programs (SAHC 1992, APA 1992). Basic research that underpins prevention programs is a further skill required (Macklin, 1993). Finally, the needs relating to each professionis clinical skills must be addressed in any continuing and postgraduate courses.

METHOD AND RESULTS

A *qualitative* survey was undertaken in March to June 1993 involving 20 in-depth interviews throughout South Australia and the Northern Territory. The qualitative data allowed the exploration of issues relating to rural and remote area practice and the development of a quantitative survey questionnaire. These respondents had difficulty in identifying their needs and their ideal continuing education program. Having been denied the choice for so long in these areas, anything was better than nothing. However, the need for flexible access to educational opportunities was reinforced by respondents.

The *quantitative* survey that followed involved mailing a questionnaire to physiotherapists in South Australia (100) and Northern Territory (70). A reply-paid envelope was included to increase the response rate. A second mailout of questionnaires was completed to non-respondents to maximise the response rate. A response rate of 70% (119 of 170) was achieved.

Participants were asked questions about themselves, their educational background, professional training, work description and continuing education needs. This paper focuses on the responses about continuing education needs.

However, the responses should be considered in view of the practice profile of these therapists. The practice profile, although variable, revealed that clientis conditions seen daily or weekly ranged from musculoskeletal to womens health care (Table 1). The research skills, practised 7% daily or weekly, were not practised at all by 41% of participants.

Table 1:

Practice profile — the percentage of survey participants reporting daily or weekly involvement in different fields.

Client condition treated daily or weekly (or skills used)	% of participants
Musculoskeletal	88
Electrotherapy	83
Orthopaedics	84
Sports injury	74

Rehabilitation	70
Geriatrics	66
Neurology	48
Cardiorespiratory	43
Paediatrics	35
Occupational health	31
Aboriginal health	26
Womenst health care	22
Research skills	7

When asked to nominate their top five choices for continuing education the respondents replied

- Orthopaedic and sports physiotherapy management (41%)
- Physiotherapy techniques or therapies (26%)
- Paediatrics, physiotherapy (10%)
- Women's health (9%)
- Neurology and Care of the Elderly for physiotherapists (14%)

A greater emphasis was placed on Aboriginal health issues by physiotherapists in the Northern Territory than in South Australia, but it was not mentioned in the top five choices for continuing education In addition, greater requests for paediatric and women's health came from the specialist-generalist, whereas some South Australian physiotherapists who had specialised in other areas did not request this

These continuing education needs when compared to a profile of the physiotherapistst daily work and the availability of other medical and other allied health professionals in the region demonstrated the diverse working environments, thereby adding weight to the use of the specialist generalist concept. In addition, these physiotherapists were more likely to be asked to act as occupational therapists and speech therapists in the absence of these professionals. Therefore the needs of all allied health professionals cannot be considered the same.

Unlike some of the other allied health workers in rural and remote areas physiotherapy has a comparatively high proportion of male practitioners; however, female workers have a greater career commitment. Overall, the physiotherapy workforce age is higher on average than the other therapist workforce age (Gadiel and Riddoutt 1993). Therefore it could be assumed that those working in a rural practice are more likely to remain there having established their careers in a rural and remote location.

MEETING PROFESSIONAL NEEDS

The current proposals for postgraduate education in rural and remote area studies must address the development of clinical skills for the specialist-generalist. The rural and remote area physiotherapistsi working environments are undoubtedly different from those of urban allied health professionals. Therefore education and training should reflect the broad range of knowledge, skills and abilities needed to provide quality health care services to rural and remote Australian communities (Howe-Adams et al 1993).

The tendency to consider rural and remote area professionals as a homogenous group ignores the variety of settings and client groups. Barker (1993) stressed the difference between rural and remote by renaming one group as very remote. A better ecatch-alli definition of these rural and remote area groups is non-metropolitan (Hodgson and Berry, 1993).

The provision of continuing and post-graduate education for a diverse group must include flexible delivery that tailors a learning experience to the individual work environment. Flexible delivery can increase access and place the learner in control of his or her educational process (Nunan, 1993). The professional support and continuing education should relate to the specific dynamics in the workplace, not the isolation or lack of actual personal contact (Harris, 1992). This in itself presents a dilemma when considering the provision of educational courses. In recognising the needs of these specialist-generalists the differing streams within this group, such as the very remote, should not be forgotten.

Distance education methodologies are a practical and acceptable solution to some rural and remote health professionals, as they provide accessibility. However, some face-to-face contact needs to be included. Face-to-face contact is preferred, with locally conducted courses considered the best option (Hodgson and Berry, 1993). In addition, the numerous benefits of face-to-face contact should not be ignored in developing networks and collegiality (Howe-Adams et al., 1993).

In the period September to November 1993 two postgraduate subjects were trialed at the University of South Australia by the School of Physiotherapy in conjunction with the Distance Education Centre. The first utilised videoconferencing facilities in Adelaide and Whyalla (360 km northwest of Adelaide). The second subject utilised videotapes, teleconferences and a weekend workshop. The second subjects methods of delivery of the second subject did not constrain students to the availability of videoconference sites and their ability to attend these sites at a set time each week.

The first subject used videoconferencing, which allows simultaneous two-way audio and visual communication. In this subject it was used to deliver lectures, demonstrate a limited number of physiotherapy practical techniques and conduct an exercise class. In addition, one weekend workshop was conducted in Adelaide. Twenty-three physiotherapists participated in the course, of which 17 were from Adelaide, five from Whyalla and one from Port Augusta.

All participants were asked to complete an evaluation questionnaire, 17 responses (including six participants at the Whyalla site) were received. Of the respondents, 13 of the 17 agreed the information was new to them, and 15 of the 17 felt it was relevant to their needs and foresaw applications in their developing career. Participants felt awkward with using the videoconferencing equipment, but this improved during the course. The students especially liked the opportunity to interact, meet rural and city physiotherapists and have access to further study. Most of all the flexible delivery method increased access and moved away from city-based delivery.

The second subject used videotapes and was enthusiastically received by students. Videotapes were supplemented by teleconferences and a weekend practical workshop conducted in Adelaide. The 10 participants were from South Australia, Northern Territory and Victoria.

The evaluation of the subject showed that audiotapes were disliked, with nine participants strongly objecting to their use instead of videotapes. Videotapes also allowed them the opportunity to rewind the tapes as required and use them in future studies. Two scheduled teleconferences enabled questions to be answered, thereby enhancing the one-way communication of the videotape. The participants also felt it was useful to have teleconferences as a forum for discussing difficult client cases as well as the subject material. Overall, the subject using videotapes was not considered as good as face-to-face delivery, but all students agreed that they would be willing to participate in a videotaped subject again. The increased access proved valuable and enjoyable to students.

FUTURE DIRECTIONS

The School of Physiotherapy of the University of South Australia has attempted to address the needs of rural and remote area physiotherapists with the assistance of funding from Rural Health Support Education and Training scheme conducted by the Commonwealth Department of Human Services and Health.

Five subjects are being developed to be offered in 1994 and 1995, and these will form a Graduate Certificate in Physiotherapy

1. Fitness and care for the older person in a rural and remote area setting

2. Infant and child health
3. Primary health care in rural and remote area communities (Health promotion strategies).
4. Qualitative research methods (including introduction to Epidemiology and Biostatistics as a basis for health promotion strategies)
5. Rural physiotherapy clinical management (includes women's health, orthopaedics and skills to train the trainer)

EDUCATION DELIVERY METHOD

The Graduate Certificate subjects conducted will each use at least two teleconferences and one videoconference to support student learning. In addition, one face-to-face meeting per subject will be conducted to orientate students and enable them to meet fellow students. These face-to-face meetings also allow practical sessions to be conducted. The University of South Australiais Distance Education Centre (DEC) will provide a library service and student counselling and can act as an advocate for the rural and remote area student. A introductory video was made to welcome the students and orientate them to the School of Physiotherapy in Adelaide.

The subjects aim to increase physiotherapy clinical skills as well as enhance the delivery of preventative services for the health of rural and remote Australians. The topics will include action research and etrain the traineri programs to enable physiotherapists to implement these preventative programs in their community. The attitudes of rural residents to particular services vary. Therefore preventative services that address the longer term needs of rural and remote area Australians may be best provided by closely integrating them with medical services which can therefore include physiotherapy (Humphries and Weinard, 1993).

In catering for the specialist-generalist the program ignores the special streams within the rural and remote area group, such as the very remote. Recognising this limitation the School of Physiotherapy will offer self-directed clinical subjects so that an educational program can be tailored to the physiotherapistsi work environment. It can provide an opportunity for physiotherapists to work in other clinical settings with more experienced clinicians.

An alternative for the future is the provision of rural and remote area studies by faculties of health, where the faculty is composed of several allied health schools. Core subjects in rural and remote area studies would be supplemented by electives in clinical professions. This cooperative offering can enable recognition in each of the professions as well as meeting the needs of allied health professionals working in rural and remote areas.

CONCLUSION

The needs of rural and remote area physiotherapists include clinical skill development. This physiotherapy skill development is not a need of other allied health professionals. Any offering of continuing education programs should cater for the specialist-generalist physiotherapists by providing a broad range of clinical skills and to implement preventative health programs.

The students undertaking the Graduate Certificate in Physiotherapy have an opportunity to increase their clinical skills. However, there are special needs of those working in unique environments which need to be met. Self-directed clinical studies are an alternative to catering for these individuals.

Distance education and the support and facilities of DEC enhance this approach while increasing access and participation for the professionals. Ultimately this will assist in providing health care for rural and remote area Australians.

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NOISE INJURY, PREVENTION AND RURAL COMMUNITIES

Warwick Williams — Australia

ABSTRACT

Audiometrists and Audiologists working in rural areas are well aware that there is a high degree of noise injury in such communities. The estimates from several surveys range from about 60% to above 80%. By a quick view of an audiogram the tester can see if the subject uses a high powered rifle and if they are left or right handed. Such survey and anecdotal evidence indicates that there is a definite problem amongst rural workers with respect to noise injury.

Further work suggests that this rural community is a very difficult community to reach in terms of the distribution of information in relation to the education of individuals and their exposure to excessive noise and the resulting noise injury. As a consequence rural communities are at a distinct disadvantage when compared to their urban colleagues in terms of noise injury education and rehabilitation.

Much work needs to be done with respect to lowering the noise levels of plant and equipment used by rural workers and the concept that hearing loss resulting from excessive noise exposure is a preventable injury not an inevitable or randomly occurring disease.

INTRODUCTION

Noise injury with its accompanying hearing impairment and tinnitus are unseen injuries in the community. The Health Omnibus Survey conducted by the South Australian Health Commission in 1990 reported the incidence of hearing loss in the general community as 19.4%. This is a significant proportion of the population. Studies indicate that noise injury is much greater and more wide spread amongst the rural community than in the general public.

In the industrial work force the process of noise injury has been noted and action plans have been adopted, the problem in the rural community has to a large degree been overlooked. This is due to a myriad of reasons, several of which are -

- figures relating to the number of individuals involved rarely show up in workers' compensation statistics as most individuals are either self employed or part-time/temporary workers;
- farmers tend to be very self reliant and do not usually complain or seek help until they perceive that there is a problem and by then it is too late;
- the physical environment in which farmers work in harsh and as a consequence they accept noise etc as part of the job;
- the dynamics of the work environment are very different from the standard industrial work place and this makes the use of hearing protection difficult;

  and
- noise injury is an "unbloodied" injury in that it has a gradual onset and has no obvious single cause.

These difficulties, and others, have led the incidence of noise injury to be a hidden and hence neglected problem.

The effects of a hearing loss on an individual, their family and close friends have been so well documented it need not be reproduced here. Programs have been directed at industry but to date no really wide ranging programs have been directed to the rural community. In our moderm work climate is unacceptable that noise injury resulting from work based noise exposure should exist and action must be implemented in order to reduce its incidence.

THE SCALE OF THE PROBLEM

The immediate difficulty that arises in attempting to survey the literature is that there is a wide variety in individual researcher's classification of a "hearing loss". There [illegible] no disagreement that there is a loss, just how it is defined. In Australia at least the criteria for specifying the degree of hearing loss is accepted as that described in "A Procedure for Classifying Degree of Hearing Loss" by J Macrae (1974). This is accepted in Australia by compensation authorities and should be the criteria always adopted. All literature reviewed here is related back to this criteria.

Screening carried out at agricultural field days in New South Wales by the Agricultural Health Unit from Tamworth Base Hospital indicate that in the rural community the percentage of the population with a hearing loss, at the level of mild or more, is in the order of 63% to 71%. Anecdotal evidence from long term studies currently being undertaken in rural South Australia support this high incidence of hearing loss in the rural community and even indicate that the incidence could reach up to 80% of individuals screened.

In August 1991 a study on noise levels on farms was commissioned by the Workers' Compensation and Rehabilitation Commission of Western Australia entitled "Method for Determining Prescribed Workplaces on Farms". This study revealed that, working on a Daily Noise Dose (DND) base level of 90 dBA, workers on horticultural farms received noise doses of up to 120% of the recommended maximum while those on piggeries received noise doses of up to 390% of the recommended maximum. Recent measurements taken by the Tamworth Health Service in north west NSW indicated that DNDs of 350% for harrowing and 125% for general farm work.

While, in most instances, due to the nature of the work in the rural community there is little direct effect on the work process or productivity, the effects on family and social life can be disastrous. The normal communication of family life is severely disrupted, participation in community activities and meetings are reduced if not completely curtailed and the individual gradually suffers from an increasing feeling of isolation. This is a very gradual process taking many years, possibly tens of years, and is frequently not attributed to a hearing loss resulting from noise injury until the loss is quite severe. The individual is typically seen as a "cantankerous, old so-and-so" and is attributed to ageing or some form of personality type.

Difficulties are experienced across the whole spectrum of activities including telephone usage, listening to the television or radio, discussing work and, the most difficult situation arising from hearing difficulties, attending meetings or listening to conversations. Tinnitus is experienced by almost half of all persons screened by the Agricultural Health Unit.

The figures from Australian studies do not stand alone. Plakke and Dare (1992) studied a group of US farmers from various backgrounds and found that "farmers have a greater high-frequency sensorineural hearing loss than can be accounted for by presbycusis alone". In fact when compared to a control group it was found that the loss was proportional to age group. For example "10 percent of the age 30 farmers, 30 percent of the age 40 farmers, and 50 percent of the age 50 farmers had a hearing handicap" clearly relating loss to length of exposure to noise.

POSSIBLE SOLUTIONS TO THE PROBLEM

Unfortunately so named "Hearing Conservation Programs" have be come to be seen as personal hearing protection programs in which the noise problem is solved by the issue of personal protection to the worker. The difficulty with this approach is that it individualises the problem and throws all of the responsibility squarely on the noise exposed worker. This difficulty of a "Hearing Conservation" approach has been discussed by Waugh (1993) and efforts are now directed at trying to adopt a "Noise Management" style of approach.

In the true "Noise Management " approach to the problem the ultimate solution would be to get rid of all of the offending noise(s). Under the current workplace philosophy circumstances never seem to operate to make this possible. Somehow noise is an accepted part of our life style and the merest suggestion that loud noise should be eliminated from the work place, or any other place, brings immediate calls of "impossible", "no noise, no work", "be realistic" etc, etc.

The next step is to encourage rural workers to purchase quieter machinery, a "buy quiet" program, and those who manufacture such machinery to design and build quieter machinery. Again this tends to be a slow process and initially meets with objections similar to those above. However, in the fullness of time, as experience in Europe has shown with tractor cab noise, the noise levels will fall if they are consumer driven. With most processes there are methods that can be invoked to reduce the overall noise levels that the operator experiences. It must be remembered that we are talking about long exposure times (except in the case of firearms) as in the case of tractors, chainsaws, and other forms of power operated machinery.

Firearm noise is in itself an interesting problem in that an experienced audiologist/audiometrist can immediately pick high powered rifle user, particularly in the case of young people, through the characteristics of their audiogram. Protection should always be worn when using firearms as damage to the ears is instantaneous.

The next step is to issue health warnings with all equipment that produces excess noise and has the potential of creating a noise injury. Alternatively the issuing of personal hearing protection when noisy equipment is purchased. Neither of which can be envisaged as particularly effective as this type of approach has not worked with other such problems in the past. It is similar with the offering of taxation incentives for producing quieter equipment, or alternatively, taxation disincentives for producing noisy equipment. Manufacturing lobbies inevitably seem to be able to overcome any political good will aimed at making such improvements in the community.

The next, long term solution, other than reducing the noise level of the equipment, is education of the consumer. This has been shown to be a difficult task. It was discussed in a paper presented at the 1993 Australian Acoustical Society conference entitled "Public Policy and the Prevention of Industrial Deafness Amongst

Australian Farmers" Here the authors established that the rural community is a "hard-to-reach" audience There are several factors that characterise "hard-to-reach" audiences, these include -

1) Fatalism - hearing loss is seen as "part of the job" and something that many rural workers suffer;
2) Possession of poor information processing skills - often due to the desire or necessity of having to leave school early in order to start work;
3) Limited access to communication channels - rural workers tend to work in isolation as part of a "family" business or as a single employee, and
4) A distrust of officialdom and dominant institutions - past and anecdotal experience leads to this mistrust as a part of the folk lore of the rural community

The NSW Farmsafe Committee has instituted a Hearing Conservation Program for the rural sector with the goal being "to reduce the impact of noise on hearing of farmers and farm workers in NSW" This program is aimed at those already working in rural areas, through publicity and the training of professional health care workers who have direct contact with the rural workers, and those individuals about to enter the work force, through education programs conducted by the Tertiary and Further Education (TAFE) system as part of normal career training

The ultimate solution is education about the hazards of excessive noise exposure through such activities as the school based "Life Education" programs This would be similar to the awareness that has been created concerning the problems associated with long term, unprotected exposure to Ultra Violet radiation from the sun

CONCLUSIONS

It is sad to see that so many individuals suffering from noise injury, a disability that is completely preventable Hearing impairment is not an inevitable part of work or life No one should have to suffer a hearing loss

Education, information programs coupled with changing work practices, "buy quiet" policies and the encouragement in the wearing of personal hearing protection are goals for the short term Education programs oriented toward young children are the long term solution The problem can be ignored no longer

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KEYNOTE ADDRESS

RURAL SCHOOLS, RURAL COMMUNITIES: AN ALTERNATIVE VIEW OF THE FUTURE

Paul M. Nachtigal — United States of America

Rural schools and rural communities are tightly linked. Traditionally, the school is very much the center of small town activities. It is a source of community identity as school patrons rally around athletic events. Plays, musical events and sports represent a major source of the community's entertainment. School news, for better or for worse, provides the basis for much of the social dialog. For many rural communities, the school represents the single largest economic enterprise. It has the largest budget, often the best physical facilities and the school staff may be the largest cadre of well-educated individuals in towns. In the US, where education is a state and local responsibility, maintaining and operating the public school represents the major investment of the community's local tax dollars. In countries where education is a national responsibility, it may be the largest governmental expenditure in the local infrastructure.

One of the purposes of this Conference is to create opportunities for conversations about the future of rural communities and my charge is to stimulate that conversation by reporting to you what educators have been thinking about and doing in the rural United States. Beginning with an historical view, I'll remind you how the needs of the industrial age formed the schools we now have. Then we'll talk about four forces that are shaping the schools of the future: First, the convergence of economic and political power; second, our transition from an industrial to information economy; third, what we have learned from the study of ecology that impacts how we organize ourselves for action; and fourth, the yearning for community. Next, the principles of education that are sustainable rather than exploitive will be discussed and examples from work in the United States will be offered. I'll finish with lessons learned from this work, in the hope that your work might benefit from our successes and that you might be helped to avoid our mistakes.

When the function of schooling was first formalised, education's primary purpose was to provide young people with the skills needed to take their rightful place as productive members of the local village. The school's first responsibility was to nourish the human resources that further the development of the local community. With the industrialization of the society, the education agenda has shifted from a local focus to a state and national agenda, preparing individuals to participate in and contribute to a competitive commercial society. And now, in the United States, national goals have been established which call for the public schools to prepare the youth, rural and urban, to be competitive in the global economy. American youth are to be first in the world in math and science by the year 2000.

Also, with the emergence of industrialization, rural communities were/are valued less and less for their own intrinsic merit, and instead have been viewed as headwaters for an extractive society. Timber, mining, agriculture and even the education of the young became resources for the urbanization and industrialization of society. Throughout many parts of the industrialized world, these forces have contributed to the decline and often the death of rural communities.

Public education, serving the need of an industrialized society, has adopted an industrial mass-production model of schooling, a model of schooling which requires large numbers of students and teachers to operate efficiently and effectively. Bigger has been equated with better. Rural communities have clearly been the loser in this construct. First, because rural schools can never be as large as urban schools, they are, by definition, considered to be second best. And, secondly, with the onset of industrialization, what rural schools have done best is prepare students to leave rural communities, either to continue their education and/or find employment. Most never return. If one views rural schools from an economic development perspective, they represent one of the major economic drains on the local community. Tax dollars and human resources reinvested, both then leave the community.

RURAL VS URBAN

The urbanization and industrialization of society has brought with it the very logical consequence of pitting urban interests against rural interests, a consequence which results whenever resources from one segment of society are used for the undue benefit of another segment of society. It is the logical consequence of a society which is based on commercial competitiveness. It is the logical consequence of representative government in which one person, one-vote gives urbanized centers control of political power and in which the centralization resulting from industrialization has concentrated economic power.

Dale Jahr, a staff economist for the US Congress, documents the demise of rural political power in the United States in his paper "*The Rural Political Economy: Change and Challenge*". He suggests that perhaps the only way rural interest will be protected in the future is to push for a "*Rural Rights Act*". It is clear from his perspective that rural America is both "disadvantaged" and "discriminated against", the two conditions deemed necessary for "rights" legislative and legal action in this most litigious of countries (Jahr, 1988: 22-24).

One need look no further in the US to find examples of the concentration of economic power than the public policy initiatives that have resulted in the displacement of agrarian farmers with corporate agriculture. In spite of the evidence which concludes that medium-sized farmers, those selling around $133,000 in crops annually, employing one or two people and using up-to-date equipment provide peak efficiency in food production, corporate farms continue to take over America's food production. Just coincidentally, these largest farms reap tremendous profits because of federal policy - from tax laws to subsidy programs - which favor these largest operations over the midsize and small producers. Just four firms account for 86% of the breakfast cereals sold in America; four companies sell 62% of the broiler chickens; three giants sell almost three-quarters of the nation's beef and the same three - IBP, ConAgra and Cargill - also control between 30 to 40% of the national hog market. Cargill, the largest of the agri-businesses, employs 42,000 people in 46 countries with an annual sales volume ($32.3 billion) equal to the combined gross national products of Chile and Ecuador. (Davidson, 1990: 162-164).

If the trends which have been inherent in industrialization and urbanization of society are to continue and if the bottom line continues to be driven only by commercial competitiveness, the future of rural communities around the world as places where the residents have any say over their quality of life is not very promising. What is clearly needed is an alternative view of the future, a different paradigm.

ALTERNATIVE VIEW OF THE FUTURE

There are four sets of forces at work which are driving society toward an alternative view of the future, a view which at least provides the opportunity for a more promising future for rural communities. The first is the concentration of power in multinational corporations as a result of centralization run amok. The emerging global society is made possible by and exacerbates the concentration of economic wealth and power, and the growing chasm between the "haves" and "have nots". Distant decision-makers, in their unceasing search for efficiency and effectiveness, make their choices for the good of the corporation, regardless of the consequences for individuals or communities. Good paying jobs are being eliminated as corporations move their operations to countries with the cheapest labor replace people with sophisticated technology. This is not only a problem for working-class laborers, even those in the "comfortable middle-class" are experiencing future uncertainty as middle management jobs are eliminated. In the United States, mine is the first generation sure that our children will be less economically secure than their parents.

The general populace of the country and certainly individuals in local communities, had little, if anything, to say about these decisions or, for that matter, any of the decisions made by the giant food processors. We have lost control of who produces our food, the quality of what we eat and to a large extent how we live our lives. Moreover, this loss of control is masked in language that disempowers people, that blinds them to the intentions and impacts of these actions. George Orwell was right about the prevalence and effectiveness of "Doublespeak" as a policy tool in 1984, he may have just been a decade too early. Firing people from their jobs is called "downsizing" and even more objectionable "rightsizing", and truncating careers is disguised as "early retirement". GTE, one of America's larger telecommunications companies, announced January 13, 1994, that it would lay off 17,000 employees "to improve customer service". (Rocky Mountain News, January 14, 1994)

The second set of forces that is moving us to an alternative view of the future is society's transition from an industrial to an information society. This transition brings with it a fundamental shift in what is valued and what is useful, and requires a re-examination of the assumptions by which we organise ourselves and our activities. Three industrial-age assumptions appear particularly outmoded. The first is centralization. Industrialization, as we have seen, valued and found useful the notion of centralization, some of the consequences of which have been discussed above. This centralization notion in public education in the US has resulted in the reduction of the number of school districts by a factor of 10, from 157,000 to just under 16,000 during the last century. Notions of centralization are now being replaced with decentralization, suggestion that the best decisions are made by people who are not in some distant place, but rather as close to the action as possible.

A second fundamental tenant of industrialization is specialization. Specialization, a legacy of the Enlightenment, seeks knowledge by compartmentalizing life into narrower and narrower slices, each with its own language and culture. As a result, doctors not only have difficulty communicating with those outside of the field of medicine, but across the specialties within the field. Contractors no longer build houses, but do concrete work or framing or plumbing. In education, content area specialists teach just biology or physics rather than science. Multi-grade groupings, once the 'norm' in one- or two-teacher schools, have been replaced with age-level teachers, along with teachers for the gifted and an array of specialists for students with "special needs". We now see, however, that it is the connections that give form to the web of life. We sense, in every field, a growing need for generalists who can see the big picture, who can work across the artificial barriers created by specialization.

The third value shift is from standardization to diversity. Whether it is public policy, taste in cars or ways of learning, one size does not fit all. In fact, the lesson to be learned from the ecology is that there is strength in diversity. Monocultures are the most difficult to keep healthy, monolithic organizations the most difficult to keep flexible and responsive to the changing requirements of their environments.

These shifts in fundamental values being brought on by the information society are much more congruent with traditional rural values. Local control, generalists and diversity, in the sense that rural is different from urban and there are great differences across communities, are values much more friendly to non-urban places than the values of industrialization.

There are direct economic benefits as well. In an information society, what one does for a living and where one lives are no longer as tightly connected. When information rather than raw materials moves, physical geography is no longer a barrier. With the proper skills and access to the information network, there will be a growing number of careers open to individuals wishing to live in rural places because they prefer the scale or location. An international gem exchange operates out of a mountain home in the Colorado Rockies. A resident of a small town in North East Kansas earns his livelihood by working in the French stock exchange. The Center for the New West, a 'think-tank' concerned with life in the Western United States has labelled these folks and others who have given up corporate life in the cities, the "lone eagles". They bring their skills and their financial resources to rural places, contributing to the local economy and make few additional demands on the rural infrastructure.

Third, a set of forces helping create an alternative future for rural areas is the growing recognition of the ecological limits of the planet. The extractive practices which characterized industrialization must give way to practices of sustainability. The "bottom line" can no longer be concerned only with financial profit. Cost benefit calculations must include all costs. Responsible leadership must now include being stewards of the world's physical and human resources. David Orr in his book "*Ecological Literacy: Education and the Transition to a Postmodern World*" makes a persuasive case for the necessity of creating a society based on constructs of sustainability and offers practical steps that must be taken to move in that direction. Orr argues that, because of the small scale and the immediacy of the environment, rural places are where this transition is most feasible. Rural communities and rural education, to the extent that we can create rural schools and institutions of higher education that will truly serve those communities, will have both the opportunity and the obligation to lead the way. Redesigning rural education to support development of sustainable communities is then at the heart of systemic reform at the center of a new paradigm for how we might live together.

Which brings me to the final force pushing for change, how we might live together. There is a yearning on the part of a growing number of individuals to become a part of "community" and thereby to re-establish a sense of control of their lives. Wendell Berry, in an essay "*The Work of Local Cultures*" speaking to this yearning to re-create community, writes:

> My feeling is that, if improvement is going to begin anywhere, it will have to begin out in the country and in the country towns. This is not because of any intrinsic virtue that can be ascribed to rural people but because of their circumstances. Rural people are living, and have lived for a long time, at the site of the trouble. They see all around them every day the marks and scars of an exploitive national economy. They have much reason, by now, to know how little help is to be expected from somewhere else. They still have, moreover, the remnants of local memory and local community. And, in rural communities, there are still farms and small businesses that can be changed according to the will and the desire of individual people. (1988)

RURAL EDUCATION AND SUSTAINABLE RURAL COMMUNITIES

So what needs to change in rural education if the process of schooling is to support the creation of more sustainable communities? Is it possible to find ways whereby the financial resources, the facilities, the teachers and administrators and, yes, even the students themselves, become central players in assuring the continued viability of rural communities? Our work with, and observation of, schools in South Dakota and Alabama over the last six years suggests that, by making certain changes in the way education takes place, this is indeed possible. Not only can schools become players in rural development, but by doing so, the education experienced by the participating students becomes more powerful.

If rural schools are to become important players in community development, we need to: (1) reconsider how we think about the purposes of schooling; (2) shift the focus of the curriculum, at least in part from a generic, national-focused curriculum to one that focuses on the local community context; (3) educate students so that they have the skills to create their own jobs rather than being prepared only to find jobs and (4) use the investments in facilities and other resources available in the school to support entrepreneurship and community development.

The Purposes of Schooling - The purposes of schooling will need to be expanded from one of only educating students to be successful as individuals to preparing those individuals to be productive citizens living in community. Thomas Jefferson talked about the need for an educated society that could engage in face-to-face, hands-on approach to problem-solving, a process that we firmly rooted in civic virtue. Students need opportunities to learn and practise such problem solving skills in real life situations. The existing curriculum focuses on generic, abstract content that has little relevancy to rural students.

Refocussing the Curriculum - Focusing more of the curriculum in rural schools on the local context allows students to connect learning with their own experience to real world objects, events and situations. One of the chapters in David Orr's book referred to earlier is entitled "Place and Pedagogy". The integration of place into education is important, according to Orr, for four reasons. First, it requires the combination of intellect with experience. It involves direct observation, investigation, experimentation, and skill in the application of knowledge. Second, the study of place is relevant to the problem of overspecialization, which has been called a terminal disease of contemporary civilization. Places are laboratories of diversity and complexity, mixing social functions and natural processes, thus promoting diversity of thought and a wider understanding of interrelatedness. Third, the study of place provides the opportunity of re-educating people in the art of living well, where they are, thus mediating the instability, disintegrations and restlessness that have contributed to the decline of rural communities. Finally, Orr suggests, "...the knowledge of place - where you are and where you come from - is intertwined with knowledge of who you are. Landscape, in other words, shapes mindscape". So, if education is to contribute to the ongoing viability of rural communities, it must pay more attention to helping young people understand the place in which they live.

Creating New Employment Opportunities - In the future, employment opportunities are more and more likely to result from small entrepreneurial developments than the expansion of large corporations. Moreover, if young people are to remain in rural communities, there are few employers from whom to seek jobs. As students better understand the workings of their community, they are more likely to be able to identify the niches which they might fill to create their own livelihood.

School Facilities and Community Development - School facilities, with their computers, laboratories, shops, kitchens, classrooms, ... could well serve as incubators for assisting new entrepreneurial enterprises. Too often this community investment in facilities is under-utilized before and after school hours, on weekends and during the summer months. As the curriculum of the school is refocussed on issues important to the local community, these facilities, as we will see later, can become the staging area for students to become involved in community development activities.

The following examples show how schools that have begun implementing these changes can in fact become important contributors to community development.

The School As An Information Resource For Community Development:

Custer, South Dakota - Dave Versteig, an economics teacher in Custer, South Dakota wanted to find a better way for his students to understand such concepts of "sales leakage" and "balance of payments". He also wanted to help students become skilled in collecting, analyzing and making sense out of raw data. As a class project, the students developed a survey instrument to determine how much discretionary money the student body of the high school had at their disposal each year, how they acquired it and how it was spent. To everyone's surprise, the students had over a quarter of a million dollars in discretionary money in a year's time, a little less than a thousand dollars per student. With this information, meaningful discussion began. Economics became real. Student and teachers talked about whether or not the students had any obligation to spend this money locally so that it would continue to circulate in the local economy ... or, was it okay to continue to drive to Rapid City (approximately an hour away) to buy their clothes, CDs and all the other purchases that seem essential to high school life. Next , the information was provided to the Chamber of Commerce. They too were more than a little interested. A quarter of a million dollars is a rather significant slice of a small town economy. Perhaps, they began to think, teenagers should be courted and seen as the potential market that they represent to a small town economy rather than as a nuisance, as is too often the case.

Because they were given the opportunity to gain insights into the working of the local economy, the economics class requested membership in the Chamber of Commerce. The Chamber responded with enthusiasm and began holding some of their meetings in the school, it being easier for adults to go to the school than the students to get to the business community.

The class also became a partner with the Chamber in application for FmHA funding to provide additional low-cost senior citizen housing in the community. Custer is an attractive destination for retired people. And, since retired people bring their pensions and personal assets with them, providing attractive housing represents an important economic development strategy. Students interviewed senior citizens, providing much of the necessary information for the funding proposal. An unanticipated benefit was the bridging of the inter-generational gap, which too often separates the young and the elderly, as a result of the interview process. Here again, the perceptions too often held about teenagers began to change as they were seen as contributors to real community development efforts.

Belle Fourche, South Dakota - During the last trimester of the 1991 school year, Belle Fourche High School offered a two hour, team taught, demographic research class. The purpose of the class was to assemble information about the Belle Fourche schools, the community and Butte County. Students taking the class received two credits, one in English and one in Social Studies. As a product, the class published a 68 page book *"An Internal Audit of Belle Fourche, Butte County and the Surrounding Area"*

According to an article in the Belle Fourche Daily Post, June 21, 1991, the 17 students learned interviewing skills, telephone skills, tact, letter writing and working with the adult society. They also learned a lot about the place in which they live. How many students understand the organizational structure and financial workings of a school district? Or, the median age of the population in Butte County. Or the percentage of residents with a college education? Because they collected and analyzed the data and then prepared the narrative and graphic representations for the book, Belle Fourche students now have an understanding of their school and community that they did not have before. Furthermore, it is in a format available to town planners and others who have a need for such information. The students and the school have become a resource for community development. The students have experienced a "real world" learning experience.

The Journalism Class in Belle Fourche represents another example of how the curriculum can be focussed on the local community and learning experiences become more authentic. Students taking journalism were assigned the task of selecting a local business for the purpose of writing a brief case study of that business. Questions they created included when and how the business was started, what goods or services are provided, what are the advantages and disadvantages of running a business in a small town. Once the case study was drafted, edited and polished, arrangements were made with the local paper to publish the stories. Students soon learned that creating the right questions to elicit the needed information took some time and thought. They also discovered that writing for the public was a very different and more difficult task than writing only for the teacher. In addition to learning the technical skill needed to create a story, the students also learned about some of the pros and cons of being an entrepreneur in a small town, e.g. the need to work long hours and take risks with one's own resources, balanced with the advantage of being your own boss and being independent.

Other benefits resulted from this activity. Once the first group of stories appeared in the paper, other businesses began calling the school to see if they could have their stories written and published. They, too, would like to get some free publicity. The local paper now had stories to print that staff did not have to write. The success of the activity was further validated when the school decided to discontinue publishing a school newspaper. Now students taking journalism became stringers for the community newspaper.

Seven schools in Alabama - Coffee Springs, Beatrice, Collinsville, Gaylesville, Mellow Valley, Oakman and Parrish - all members of a rural school coperative, PACERS, organised and supported by the

Program for Rural Services and Research, University of Alabama, have been conducting health inventories for their communities. The inventory, designed by students provides a way to inform the communities of health problems in the area and, as a result, help those communities gain access to better health information. According to Athena Perex, student in Coffee Springs, "Students today often feel that their education is of no real value. The health inventory project helps students gain self-confidence, express their creativity, and come closer to the community. It makes education real. We create useful information, serve our communities, and apply our skills and hopes by doing and learning." As a result of the inventories, newspaper articles have been written, planning is under way for community-wide health fairs and blood pressure screening for the elderly is now available. In one community, a high incidence of learning disabilities is thought to be connected with lead poisoning. Local high school students, with the help of neighboring college students, are undertaking a study to identify the possible sources of lead.

Community development, to be successful, must be based on an understanding and appreciation of the local community, its past, its current strengths and weaknesses and its possibilities for the future. There are many ways that one can learn to know the local community all of which can enrich the learning experience for students. The above examples are ways that students can understand their communities from an economic perspective, a demographic perspective and a health perspective. Other schools involve their students in understanding their communities through documenting local history, studying local architecture, photography or studying the local environment. What seems clear is that, as students learn to understand their community and become engaged in the life of the community in a real way, they develop a new appreciation for that community. They become both interested in the community and willing to consider the option of staying, of creating a future for themselves locally, rather than believing that the only option available to them is to move to a larger metropolitan area.

The School and Entrepreneurship

If rural communities are to continue to exist as more than a staging area for moves to larger places, more than bedroom room communities as people commute outside for jobs, that is if rural communities are to be sustainable as communities they must provide the opportunity for their inhabitants to live well. First, that means gainful employment. As indicated earlier, finding employment in rural communities often seems difficult. There are few employers. Therefore it may be necessary to "create one's own job" rather than "finding a job". Part of a good education is helping students learn the skills and nourish the attitudes required to be a successful entrepreneur. They must learn to exhibit creativity, persistence, reasoned risk-taking and adapt an analytic stance towards defining and arriving at logical solutions to day-to-day problems. Unfortunately, traditional education is more likely to inhibit such skills rather than fostering these skills. Students are rewarded for right answers rather than for taking risks or pursuing creative solutions to problem-solving.

There are, however, examples where students have been encouraged and assisted in becoming entrepreneurs. Some examples are real success stories, others have allowed students to try and learn from experiences that were less than successful. Some entrepreneurial activities have involved students as individuals, others have been school efforts with broad institutional support.

Old World Breads - A young woman in Belle Fourche, South Dakota who was then an eleventh-grader, was a member of the Rural Development class. A student who was not particularly challenged by the traditional curriculum, she suddenly became interested in school when her class work included the opportunity to plan for the creation of her own busness. First, she learned to research what kind of a business she might be interested in and might have a chance of being a success in. Baking came to mind, but what unique niche would make her product special?

Many early settlers of the area had migrated from various European countries so, she reasoned, perhaps baking "old world" breads could be her special niche. The next step included finding old recipe books and identifying those particular recipes that would give her the product that she wanted. Then came develop a business plan, including laying out the kinds of equipment and supplies that would be needed to get the business under way. Clearly, the mixers, the ovens, the utensils required to establish a bakery would require a major investment of funds, an investment which most high school students would not be able to make. However, in the community, she found a facility that was not in use full-time that did have all of the equipment needed. The facility was the kitchen for the hot-lunch program, right there in the high school. She then developed a proposal which could be taken to the school administration and the school board to see if it was possible to contract for the space, the equipment and arrange to reimburse the school for electricity, gas and any other additional expenses that might be incurred as the result of the business operation.

Obviously, determining the costs of such items as the additional gas and electric used was a good problem-solving exercise related to math and science. Preparing a persuasive proposal for the administration and the board took some careful writing. Establishing the potential viability of the business required knowledge of economics and business management. With the assistance of the teacher and others in the community that she had sought out for help, she developed the proposal, presented to the board and rejoiced as it was approved.

The bakery business became a reality. The product produced was sold in local stores. One minor glitch was experienced in marketing. The regional manager of one of the markets, which was a part of a grocery chain, did not want products in the store that were not the chain's own brand. Since he made regular weekly rounds, on the day of the week during which he made his visits to this store, Old World products were not available at this location. The other days of the week, they were on the shelves.

This is an excellent example of the use of existing facilities which have already been paid for by the community to support the creation of a new business, which then contributes to the local economy. As long as policies and practices are in place to assure that taxpayer money is not promoting unfair competition, schools can serve as incubators for new businesses while expanding and enriching the learning opportunities for students. Businesses such as this can be spun off when the student graduates or when it is strong enough to purchase its own facility. Or, perhaps other students might be interested in running the business as a school-based enterprise. Other possibilities are that the person starting the business does not wish to continue it, or, after a period of time, finds that the business is not viable. Whatever the case, important learnings have taken place with relatively low risk and, for the time it operated, unique products were available that were not otherwise on the market.

Tiger Computers - Cedar Bluff High School, also a member of the Alabama PACERS cooperative of rural schools, has created Tiger Computers, a school-based, student-operated corporation. Notepads advertising the corporation are complete with logo and their slogan, "Building quality computers for students by students". Started with a small grant from the Lyndhurst Foundation, the corporation has its own corporate student organizational structure complete with quality control provisions. The high quality computers and related communications equipment are being built at low cost and many are being sold to other members of the Co-op. Here is a school-based entrepreneurial activity that is (1) helping this school and other schools in the co-op overcome isolation and distance by providing affordable equipment for electronic networking, (2) providing students with the tools to become functioning members of a technological society and (3) providing students with marketable skills and an entrepreneurial disposition.

Consistent with the principles of cooperation which characterize the PACERS program, a neighboring school, Red Level, has also initiated a school-based business, a print shop, which is working with Cedar Bluff's computer operation printing the manuals, warranties and other materials which accompany the finished product (Special education students play a central role in the operation of Red Level's print shop.) Still a third school in the cooperative, Meek High School has developed a marketing project which will help market Tiger Computer products beyond the schools in the Cooperative.

Aquaculture - Aquaculture is the fastest growing sector in US agriculture. Rural schools in Alabama are discovering that it can be an effective tool in secondary education for linking academics with vocational agriculture. Since basic principles of biology, chemistry, physics and math are all applied in aquaculture, along with the principles of production agriculture, a hands-on aquaculture facility can make school much more interesting for students and teachers alike and open up science education to all students.

Two custom designed aquaculture recirculating systems are presently being installed, one at Meek High School in Arkley, Alabama, and one at Florala High School, Florala, Alabama, by the Fresh Water Institute of Shepherdstown, West Virginia. The system's five components allow the students to bring fish from egg hatching to 1,000 lbs of marketable tilapia fry a year. (Tilapia is a freshwater fish which is appearing on the menu of some of the fanciest restaurants.) In each case, the tanks of the aquaculture system are located in green houses and offer potential for integration with plant production. The first harvest is scheduled for next September/October when the schools plan to have fund-raising dinners featuring their own fresh fish.

SO WHAT HAVE WE LEARNED?

Need for a new world view of rural communities - The notion of having schools involved in community development is a harbinger of a larger conversation concerning the future of rural areas. This conversation grows out of the realization that rural communities have not been well served by the urbanization and industrialization. As indicated earlier in this paper, rural communities have served as the head water for an extractive society. Rural communities have become disempowered both politically and economically. Unless rural people begin to make some decisions on their own behalf, the future of rural communities is dim indeed. At the same time, there is a growing realization in the larger society that all things are connected - there is no "away". We can't throw things "away" and believe we have no further responsibility for what happens to them. No longer can rural unemployment problems be solved by moving to the city. And, no longer is it possible to escape drugs and crime by moving to the country. Healthy urban communities will exist only if there are healthy rural communities. Healthy rural communities cannot exist without healthy urban centers. The viability of both will require finding common ground which exploits neither. So, involving schools in community development represents an effort to make use of a major community resource to contribute to the on-going viability of that community rather than serving only to drain resources from that community.

Successfully involving schools in community development as described in the above examples is dependent on this larger conversation taking place at the community level, a broad-based conversation that results in a new world view about the nature of rural communities. Books such as "*The Broken Heartland: The Rise of America's Rural Ghetto*" by Osha Grey Davidson, "*Ecological Literacy: Education and the Transition to a Postmodern World*" by David W. Orr and "*Community and the Politics of Place*" by Daniel Kemmis can help focus this conversation. While schooling that primarily prepared students to leave local communities was good enough for the last generation, it is nt good enough for this generation if fundamental community development is to take place. Successful efforts to involve school in rural development are not just "school" activities, but activities which integrated efforts with the community that address fundamental community needs.

Rural school/communities cannot do it alone - Schools and communities that pursue an alternative view of the future cannot go it alone. They need the moral support and the energy which comes from working collaboratively with their neighbors. We have found that three to seven neighboring communities sharing ideas, celebrating successes and learning from each others failures facilitates the difficult but rewarding effort of taking action on their own behalf. Such efforts can also benefit from assistance from the outside. However, this assistance must be given on the local's own terms, when they are ready and adapted to their particular needs.

Not a packaged program - Successful efforts to involve schools in community development represent an organic process growing out of the unique conditions of that community, it is not a technical solution based on a pre-packaged program developed elsewhere. Successful efforts require a different view of teaching and learning. Rather than focusing only on textbooks and standards which have been developed "out there", the curriculum grows out of real issues important to students and the local community. Involving students in activities that connect with their own experience that require the use of skills from various disciplines, that are carried out in cooperation with others, that result in a useful product, are the most powerful kinds of learning experiences. A different kind of teaching is needed, one that goes beyond the controlled lecture and text books, teaching and learning and one which involves students in designing the day to day activities of schooling.

Establishing different community expectations for schools - As indicated earlier, successfully involving schools in community development requires expanding the mission of the school beyond traditional definitions with the curriculum including a focus on the local community. There are other, more mundane issues to be faced if programs are to be successful. The first is convincing the public that the community and its environs are laboratories for learning and that students will be out working in the community during school time, not hidden away in classrooms. There are also issues about liability when students are not always physically under the direct supervision of the teacher. Experience has suggested that these issues are not insurmountable and can be resolved by working closely with the community.

Fundamental community development is more than job creation - living well in community in more than economics. It is also appreciating the history, the art, the literature, the music of the region, the place which one inhabits. As rural schools have become a part of the industrial model of education, the local culture has lost its currency. We've not examined assumptions that is not real history if it is not history of some place away, or that literature is not of value unless it is part of the small canon of Shakespeare, Shelley or Keats. Folk music which grows out of the pain and celebration of everyday life is perceived as not only inferior to the symphony, but silenced by it. Emphasizing the genius of place does not suggest a parochial education. It expands the notion of what is good and beautiful, of what makes a well-educated, well-prepared person, to include intimate and deep knowledge of who one is by way of knowing where one comes from. It is a vehicle learning how to live-in-community in the most humane way. If one learns to live well in a local community, the possibility of living well in the larger global community is more likely.

Involving schools in community development represents the best of school reform - Finally, providing students the opportunity to become engaged in real learning represents a level of school reform that goes far beyond the national goals or higher standards. Integrating schooling with the day-to-day life of the community, providing students the opportunity to be apart of society now rather than some time in the distant future, involving students in the struggle of solving complex issues which are important to them and their community would not only provide much more powerful learning, but it would go far in reducing the growing alienation of youth. School can become real life, not something one endures until real life begins. School reform which does not relate to community development in its broadest sense will be of little consequence.

SUMMARY

Consequential school reform takes advantage of the tight links that exist between rural schools and rural communities to benefit both the individual student attending rural schools and the community in which that student lives. While the needs of the Industrial age dictated schools when the standards were centralization, specialization and standardization, the Information Age values decisions made closest to the action, generalists with broad vision who understand connections among things, and the strength that comes from diversity. Rural education in the United States is reforming, transforming itself to be more useful to its clients and its communities by reconsidering its purposes, focusing on local community context, providing students the skills to create jobs, and maximizing benefits to the community from investments in education facilities and faculties. Rural schools can function as information resources for community development, directly and indirectly support economic development, and make real contributions to the physical and cultural health of communities.

Successful efforts share some common principles. They begin from a belief that the urban/rural rivalry is outmoded, that a healthy nation needs a vibrant rural and urban sector. Rejecting a deficit model, they assume that rural areas have strengths which are identified, acknowledged and built upon, in concert with others. Each project, each effort involves people acting outside their traditional roles and responsibilities, taking risks and making changes for the greater good. The greater good, the development of the community, includes but goes well beyond economic development to encompass improving public physical and mental health, increasing appreciation for the participation in cultural activities, and improving education fundamentally. Reforming education by developing students prepared and practised at living in community will transform the way we live together.

PRESENTATIONS AND WORKSHOPS

THE COMMUNITY AND CONTEXTUALIZED SCHOOLING: PROCESS AND PRINCIPLES

Robin Lambert — United States of America

The phrase community-contextualized education implies both a school structure and a curriculum which engages students in academic work that serves a need or interest in the local community. It is aimed at addressing some of the needs of rural communities and students which have been ignored in national education policies. Community-contextualized education requires a collaborative process of reflection, dreaming, and planning through which local residents, teachers, and students identify local strengths and needs and begin building an educational program in response.

The PACERS Cooperative of Small Schools, organised by the Program for Rural Services and Research at the University of Alabama, is a group of K-12 schools located in 25 rural Alabama communities. It is creating a program of contextualized education that is transforming their schools and addressing community needs that have gone unmet for years. The PACERS Cooperative has crafted a process and identified several principles necessary for an effective program. And, it is discovering some of the outcomes of community-contextualized education.

BACKGROUND

For most of the 20th century education in the United States has been moving toward a standardized approach, one that is increasingly specialized, centralized, and urbanized. Schools have been age-graded, ability-grouped, required to hire specialist teachers, and placed under the administration of ever-enlarging school districts and educational bureaucracies. Despite language about local control, American schools are generally forced to implement state policies which are driven by national agendas. The results for rural schools and communities have often been devastating.

One of the most immediate results has been the elimination of rural schools and districts altogether. The total number of American schools and districts has dropped dramatically this century. The closure of rural schools often deals a death blow to small communities where the school serves a variety of social, political and economic functions.

A more insidious by-product of the drive to standardize schools has been the implicit message sent through curriculum, school structure and location, and administrative protocols that rural communities and their values, skills, and knowledge are backward and substandard, places and ideas to be left behind. Increasingly, curriculum has been abstracted and generalized, directed more toward colleges and corporations than toward the community or its students. This standardization has often blocked small rural schools from accessing their own unique strengths and resources. It has also accelerated the drain of services and resources, including young people, out of rural communities.

Local context. Within this national context, Alabama faces additional difficulties. It is the nation's second poorest state. Fifty-five percent of its school children live below the federal poverty level. It is also a diverse state. Thirty-eight percent of its students are of African descent, forty percent are rural by U.S. census definition. In education policy, the state has followed national trends. Schools with fewer than 500 students have been designated "substandard due to size" and slated to be consolidated. Thousands of rural children ride school buses four and five hours everyday. School structure and the mode for delivery of services has also been mandated at a state level with little regard for the unique circumstances, needs, or population sparsity of rural areas.

The Program for Rural Services and Research (PRSR) at the University of Alabama has been working since 1979 with rural schools and communities in a variety of partnerships defined by the communities. Through these partnerships we were able to see that rural communities which still had schools tended to be much healthier, to have a livelier public life, more access to public services, and stronger economies than similar communities which had lost their schools. Our research and extensive experience with young people convinced us that rural students fared far better in small community schools than in distant consolidated ones. We learned that small rural schools, regardless of their demographics and location, possessed similar characteristic strengths, namely close ties to their communities, supportive and inclusive atmosphere, and a flexibility, responsiveness, and participation borne of small size. They also faced the common problems of poverty, isolation, inappropriate externally imposed standards, and the continuous threat of closure.

In 1991, we began to organize a representative group of schools from around the state with the idea that by working together in an intentional and ongoing fashion schools could build on their shared strengths and begin addressing their common problems. We hoped that through collaboration they could secure external resources and undertake innovative programs that no school could manage on their own. By the spring of 1992, the PACERS Cooperative of Small Schools was organized and its 29 member schools had generated a program of education reform and sustainable community development that would contextualize many of the academic activities of students squarely in their own communities.

CREATING A PROGRAM OF COMMUNITY-CONTEXTUALIZED EDUCATION

When we at the Program for Rural Services began organizing the PACERS Cooperative we had only a vague vision of what it would be. We knew it would be representative of rural Alabama geographically, demographically, racially, and culturally. We wanted it to be a vehicle through which rural communities could exercise more control over their own future. We possessed extensive information and perspective derived from our experience around the state, but our most important contribution was the faith we have in the community residents, teachers, and young people we would be working with. We trusted the capacity, good will, and imagination of rural people.

When we started we had never heard the phrase community-contextualized education. That approach to schooling took shape through a series of planning meetings held in each Cooperative school and among groups of schools who were working together.

The Planning Meetings. The PACERS Cooperative was organized through a series of planning meetings, facilitated by PRSR staff, in each school. Teachers, community residents, and students met to reflect, dream, and plan together. This grouping of participants proved essential to the success of programs. Each group brought unique perspectives and ideas. In many instances the planning meetings were the first time these different constituencies had sat down together to discuss their community and school.

We posed two questions for each group 1) What are the strengths and resources of your school, community, and students? 2) What are the needs of your school, community and young people?

It was very important that the group define their resources and needs as they saw them. Too often external agencies and interests have defined and interpreted rural needs, extracted rural resources, and obscured or romanticized rural strengths.

In almost every community the conversation about local needs became quite poignant and kept turning to basic human requirements: better food, more adequate housing, good and meaningful work for local residents. Participants observed that many children ate out of their grandparents' gardens while the traditional skills of growing and preserving food were being lost to young people. Thinking into the future they asked, "who will feed their children?" Community residents, especially, expressed a sense of loss and worry about the decline of skills and knowldge indigenous to rural areas; canning, carpentry, knowledge of local plant and animal life, gardening and animal husbandry - the skills of self-sufficiency that have sustained rural life and underpinned urban life. Students generally liked their schools and communities but expressed frustration and boredom with their curricula and a desire for more challenge and responsibility. They also revealed concern about their futures, worrying what kinds of jobs they could get and where they would have to go. All the participants bemoaned the dearth of goods and services and all wanted more opportunities for celebration and fun.

When participants began identifying local resources and strengths the conversation turned lively. Young people were uniformly identified as the community's greatest resource. But this revelation was shadowed by the admission that young people were being exported to urban centers in search of jobs and educations that rarely brought them back to their home communities. Too often rural communities themselves had defined success for their young people as "making it" in a big city or far away company. Communities were identified as the second greatest resource. Here participants underscored the variety of skills possessed by local residents and the good will most residents harbored toward the school. Rather shyly, participants wondered if there were resources in their southern, rural, African, and the Appalachian cultural heritages - their musical traditions, foodways, and family stories - resources they valued but which had often been slighted in school. Finally, participants identified the school itself as a resource. It helped hold the community together and create common ground, a characteristic especially important in racially and economically diverse communities. The school itself was manageable, free of major disciplinary problems, and characterized by everyone knowing each other.

The discussion of needs and resources was followed by two more questions posed by PRSR staff. 1) What would you like to do in your school and community if you could do anything? and 2) How can you bring your strengths and resources to bear on your needs? At this point the conversations exhibited a paradoxical genius. Students needed more meaningful and challenging educational opportunities and stronger connections to their communities; communities had all kinds of needs for which external solutions were unavailable. One group's need was the other group's resource. Spontaneously, throughout the Cooperative, schools and communities began figuring out how students could address the long-neglected needs of rural communities.

Each school then wrote a school plan identifying how they would begin to meet their needs and interests in ways that were appropriate to their circumstances. We promised to try to help them raise the money and gain the latitude to implement their programs. We put two parameters on this discussion. First, they could not create a program that had the effect of "tracking" students in ability, racial, or gender groups; and second, they could not create a program that would require ongoing external financial support after the initial start-up period.

As schools drafted their plans, the PRSR organized "cluster meetings" of schools in geographic regions. At these meetings representatives of each school shared their plan. The schools discussed how they could support each other and work together. The cluster meetings proved invaluable in the planning process. They surfaced new ideas, raised the ante on the quality of work produced, created common purpose, and helped overcome the competitiveness, isolation, and defeatism that paralyzed many schools. The meetings also generated great enthusiasm as these small overlooked schools realised they were creating new, exciting, and more appropriate ways to educate students in rural areas. After the cluster meetings schools revised their plans. In the spring of 1992, representatives of all 29 schools met together, shared their plans, and forged a common program of education reform and community development.

BETTER SCHOOLS BUILDING BETTER COMMUNITIES

A Program of Community-Contextualized Education

While many of the plans of the Cooperative schools were created as specific response to particular circumstances in individual communities they shared common themes and in many instances the proposed projects were quite similar. Three themes emerged and were gathered together under the heading Better School Building Better Communities, which is the Cooperative's program of education reform and community development.

In "Genius of Place", the first of these themes, students study, document, and produce new information about their communities. Through "Sustaining Communities", students provide goods and services for the community at the same time they build their own skills of self-sufficiency. The final component, "Joy", incorporates the elements of celebration and established the bonds of "common purpose and mutual enjoyment," as aptly stated by the teachers at Harlan Junior High School. Several examples of activities in each of these areas are described below.

Genius of Place

1. Student-staffed community newspapers. The complaint surfaced in many planning meetings that news events in rural communities were rarely covered in regional media. Students voiced indignation that, "they only put us in the paper if something bad or bizarre happens." Students also expressed concern about what it meant that local residents had no vehicle through which to speak for themselves or to each other about important community issues. In response they decided to create local newspapers which students would staff. These papers include school news and they function as full-fledged community papers-selling advertisements, addressing, local events, and giving residents a pubic voice.

2. Community histories. The history of rural places is not included in state, national, or world history courses in Alabama schools. Feeling cut off from their own pasts, students proposed a community history project through which they would learn the tools of historical scholarship and begin writing the history of rural Alabama starting with their own communities. They plan to share these histories with each other and hope to be able to teach each other local history through the Cooperative's distance learning technology.

Sustaining Communities

1. Shelter. Through a partnership with the Farmers Home Administration, a federal rural housing agency, students are building low-cost, solar-heated houses and rehabilitating existing housing stock. The program addresses the serious problem of inadequate and deteriorating homes and teaches students marketable skills. It also ties the activity of home-building directly to math, science, and vocational-agricultural programs.
2. Food. To begin reclaiming the rural skills of growing and preserving food and as a way to study the life sciences, statistics, and geography, several Cooperative schools are starting school gardens, opening greenhouses, and building livestock centres.
3. Good Work. Recognizing the steady erosion of rural economies and infrastructure, Cooperative schools set about the business of creating good work opportunities for their young people. Tiger Computers, at Cedar Bluff High School, is a student-run computer assembly and software company developed to serve the technology and communication needs of the PACERS Cooperative. Students are building and selling computers and designing hardware and software programs which link schools to each other, to information utilities including the Internet, and to library resources unavailable in rural areas. At Meek and Florala High Schools students are running aquaculture projects, learning a variety of academic skills and introducing local residents to this small-farm opportunity.
4. Health. Through this component students are addressing a variety of health needs in rural communities. They created and administered an inventory designed to determine the health status of rural children and adolescents. Students are testing well, creek, and pond water and reporting their results. In one community which needs a new water and sewage system, students are conducting the water, soil, and perk testing and are studying different types of water/sewage systems to make recommendations to the town council.

Joy

Students are designing and building local parks, putting on plays, and mounting musical celebrations which feature local musical traditions and groups as well as music created by the students themselves.

Processes

The processes for creating a community-contextualized educational program are essential to its success. The basic components of a good process are distilled below.

Students and community residents as well as teachers must be involved in the reflecting and planning process. For a program to work it must be rooted in both the school and community. The only way for this to happen is if everyone with stakes in its outcomes are involved from the beginning. Each group brings different perspective's to the discussion and all are necessary for substantive change.

The process must open up the participant's own thinking. Rural communities have often become passive, accepting what others say about them and giving up the right to speak for themselves. In order to break this pattern the discussion should focus on identifying strengths, resources, and needs as participants define them. It should encourage participants to dream about what they want to do and to figure out how to bring their resources to bear on their needs. If there is an outside facilitator, that person or group cannot convey an agenda or negative attitude about the capacity of the local community.

Inter-school collaboration is very helpful. The opportunity to share ideas and build mutual support between schools raises the quality of work produced. It helps overcome isolation and increased the likelihood of each school being able to accomplish its goals.

There should be a mechanism to keep the process going. Developing a community-contextualized education program does not end with the planning phase. It must continually reflect on the work, bring new people into the process, and keep working to identify strengths, needs, and potential program activities and partners.

The process should structure ways to support teachers as plans are implemented. Teachers express exhilaration at the response of students and community residents to contextualized educational opportunities. But they also indicate that efforts to change the way they teach can be difficult and may require new skills that were not part of traditional teacher training programs.

Principles

Several basic principles underpin a successful community-contextualized education program.

Students are resources and contributors, active participants in designing their curricular activities. This is a substantial shift from traditional approaches in which students are passive recipients of knowledge delivered through an educational program formed for them rather than with them. Contextualized education values the intelligence, will, and capacity of young people.

Contextualized education starts with the community and works toward the curriculum. It addresses real community needs rather than problems fabricated for student practice. It is necessarily interdisciplinary and hands-on. It differs radically from programs which seek a hands-on project to support a curricular shift and which often strike students as unauthentic.

Contextualized education has a strong public dimension. Because so many activities are conducted in the community, they succeed or fail in the public eye. This aspect of the program helps reinforce the purpose and value of work for students. It also underscores the necessity for ongoing collaboration between community residents and school staff.

Outcomes

Although the efforts of the PACERS Cooperative are still young, there are indicators of significant outcomes from its efforts to contextualize rural school curriculum in the local community. Students gain important intellectual and critical thinking skills as well as practical skills, many of which are being lost to young people. Because it involves a variety of learning modalities, students who reject paper and pencil curricula often find purpose and success in this approach. It is entrepreneurial in nature because it requires a level of imagination and initiative rarely required in other aspects of school. Education contextualized in the community is complex and organic. It mirrors the work world of adults. Without heavy-handed moralism it infuses the educational process with an ethical component of interdependence, cooperation, and respect at the same time it teaches young people that they are valued and their contributions are expected.

Communities get needed work accomplished and resources identified. The energy of its young people is released on the community itself. A stronger future orientation develops as the community's infrastructure is strengthened and as residents gain new communication and planning skills.

Conclusion

Education contextualized in the local community is a statement of the importance of place and the value of community. It continuously focuses on basic human requirements. It helps students gain an understanding of the broader world by building a specific knowledge of a particular place and its unique and complex environment, history, and culture. It is an antidote to the belief that all knowledge is portable and generic. Community contextualized education can both produce and recover important knowledge and perspective, information that is needed to sustain the futures of rural communities.

EDUCATION AND TRAINING FOR RURAL TEACHERS AND PROFESSIONALS

Colin Boylan and Helen Bandy – Australia, Canada

ABSTRACT

Rural areas have traditionally had problems recruiting suitable professionals who are committed to remaining in the district. Part of this problem stems from the isolation experienced by professionals when they work and live in the bush. In this presentation , we identify seven variables that impinge on the educational needs and training requirements for rural professionals. These are: 1. Selection; 2. Multiculturalism; 3. Community; 4. Paraprofessionals; 5. Government Resources; 6. Induction – Mentorship; and 7. Preservice - Inservice programs. Within each variable we examine specific 'best practice' programs that have been developed to enhance rural professional retention.

INTRODUCTION

In many small rural and isolated communities, professional people like teachers, nurses, doctors, and social workers are often regarded as transients. Most professionals have come to the community from somewhere else. They are typically not 'a local' and tend to stay for only a few years. This perception of rural professionals – however accurate or inaccurate it may be – is cited among the contributory reasons why attracting and retaining rural professionals is a continuing issue for these communities.

The heart of this issue is the focus for this keynote presentation: the education of and training for rural professionals. We will examine the multi-dimensional complexity implicit in addressing the educational and training needs for rural professionals.

Part of the challenge in addressing this focus is the disparate nature of the groups, their training programs, their appointment practices, their certification requirements, their location in rural regions and their degree of unionisation. We believe there is a need for a cross-disciplinary analysis and synthesis of the approaches, strategies and programs used in each of the professional areas that target the selection and recruitment of suitable professionals who are committed to remaining in rural communities for longer than one or two years. This synthesis of 'best practice' has been singularly lacking to this point in time. To provide substance to this point, a few examples are described:-

1. Rural Teachers. The Ministry of Education in Western Australia in 1994 commenced an inquiry into rural teacher appointments and retention practices. The Ministry of Education in British Columbia in 1988, provided expansion funds to the three faculties of education to form consortia with Regional Colleges and their neighbouring school districts, to provide local teacher education programs. A further incentive was offered in 1989, a Student Forgivable Loan Program for all new teachers in B.C. School districts that the Ministry identified as rural; and
2. Rural Doctors. The Australian Federal government has initiated through the Family Medicine program, a strategy known as the Rural Training Scheme to train General Practice doctors for rural practices and assist these doctors to become vocationally registered General Practitioners. The Ministry of Health in British Columbia has an alternate fee payment program for rural doctors as well as a northern and isolation travel program for specialists.

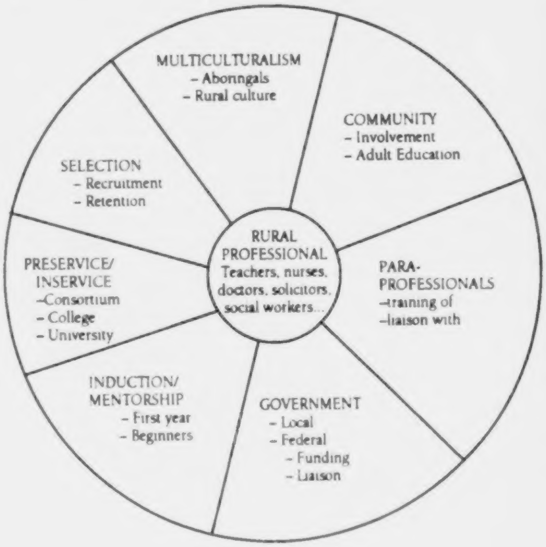
Recruiting and retaining professionals in rural areas have been noted as the twin edges of the personnel problem in many countries including Australia and Canada. This problem is one that is influenced significantly by economic conditions. The recent recession in many Western countries and the balance of supply and demand indices for employment positions has led to some interesting situations. For example, at the present time in British Columbia and in most Australian state education systems, teacher turnover rates are lower than they were ten years ago. This tightening of the employment market has led to a more stable teaching population in urban and rural areas. Teachers are also staying, on average, longer in their current positions. In British Columbia, research conducted in the early 1980s by Haughey and Murphy (1985) suggested teachers stayed, on average, for two years in a rural school. Recent data by Storey (1992) and Bandy and Boyer (1994) indicated teachers remained, on average, for five years. Similar patterns are evident in most Australian state education systems. Educational administrators and school systems are more fortunate than some other professional occupations as this stability and a surplus of applicants for the few positions vacant ensures a 'best qualified' applicant is appointed. Unfortunately, where supply and demand are more closely balanced in professions such as doctors and occupational therapists, rural communities still find it difficult to attract and retain these professionals.

The Complexity of Recruitment and Retention

There are many variables that affect the process of who applies for and is appointed to a rural position. Some variables relate to the biography of the applicant, other variables to their pre-employment education and training programs, others relate to the process of adjustment and work satisfaction in the rural setting. One frequently cited concern that rural communities must acknowledge and address in their recruitment and retention practices- is isolation. Research conducted on rural professionals who leave their communities after a short time clearly establish isolation as the main reason. A recent survey of physicians in the rural areas of British Columbia showed that doctors felt isolation from other medical colleagues, was more detrimental to their job satisfaction than social isolation.

In this keynote presentation, the main variables that are identified and regarded as central to improving the selection, recruitment, training and retention of professionals for rural areas are outlined in Figure 1.

Figure 1 Variables that effect rural professionals



Each variable will be briefly addressed. Some of the issues, questions and exemplary programs that pertain to that variable will be examined.

1.0 Selection

The selection variable consists of two major and interrelated components –

i) the RECRUITMENT of professionals for rural locations; and

ii) the RETENTION of professionals in these rural locations.

1.1 Recruitment Issues and Practices

Within this component, issues that need to be examined can be framed as a series of questions for researchers, administrators and communities to consider

1) What personal characteristics will predispose professionals to seek out a rural appointment?
2) Can recruitment practices also identify applicants who are likely to stay in the rural community for a extended period of appointment?
3) What aspects of pre-service educational programs offered by particular tertiary institutions increase the likelihood of professionals seeking a rural appointment?

In New South Wales, the Department of School Education initiated the Rural Teacher Education Scholarship program in 1989 to select and appoint beginning teachers to rural and isolated schools. The program has been well received by both pre-service education students and rural community organisations as a means of recruiting teachers who understand and appreciate rural schools and communities. The Royal Australian College of General Practitioners through its Directorate of Rural Education and Training actively selects potential General Practitioners for its Rural Training Scheme through a comprehensive screening process conducted before potential participants complete the university based studies.

The decentralisation of education programs in British Columbia to the Regional Colleges has provided access to teaching, social work and other professions for many people living in northern and rural areas. The Remote Area Teacher Education Program (RATEP) conducted by James Cook University allows Aboriginal and Torres Strait Islander students to remain in their isolated communities while completing their pre-service training. These future professionals are often mature people with families who wish to remain in their rural community and are likely to seek employment in their communities upon graduation.

1.2 Retention Issues

To assist in understanding how to retain professionals in their rural locations, the Challenge-Deficit Model of Ankrah-Dove (1982) provides a useful interpretive framework. In her paper, Ankrah-Dove suggested the sociological orientation held by the individual will influence the manner in which the professional reacts to a rural appointment. She suggested that those individuals who hold a 'challenge' viewpoint focus on the positive, beneficial, personally and professionally satisfying aspects of the rural lifestyle and enjoy their time in the rural community.

The 'deficit' viewpoint focuses on the lack of services and sporting facilities, the isolation from family and friends, the long distances to go anywhere, the need to receive compensatory benefits for the hardships/dislocation from larger centres. People holding a 'deficit' view are often in the rural location because they see it as a fast-track promotional move for their career or they were initially attracted to the idea of a rural appointment because of the 'fringe benefits' such as extra salary.

Research by Boylan (1991) suggested that those teachers who remain in rural location(s) for extended periods of time do hold this 'challenge' viewpoint. A survey in British Columbia supports this view, finding that the teachers who remain in their rural appointments claiming a high level of job satisfaction possessed at least one of two significant attributes:

i) were stable in their family life (often a professional couple where both partners were employed) who were self-contained introspective people, and
ii) were 'joiners' who belonged to clubs and other interest groups and thus became actively involved in the life of the community.

These teachers form the continuity and stability in educational settings valued by their communities.

Questions that arise for retention practices include -

1) How can 'challenge viewpoint' people be identified? and
2) What are appropriate ways of supporting and nurturing these professionals in the rural communities?

Some of these questions will re-emerge in other components of Figure 1. In particular, the nature of education programs, the location of the educational institutions, the inclusion of courses on rural sociology, and the opportunity to engage in supervised practica in rural locations in the pre-certification programs will be raised. These provide guidance to the selection variable.

2.0 Multiculturalism

Settling into a new community is a personally challenging process. For a teacher or professional appointed or recruited to a rural location, there are many tacit, local mores, traditions and beliefs that will be encountered. The degree to which local cultural values impact upon the professional will affect the ease of 'settling into' the district.

In some rural communities, the professional will encounter other cultures and world views to the one(s) they know. These differences can be both exciting, challenging and inviting to participate in the new rural culture as well as being sources of anxiety, isolation, and alienation.

For example, in some rural locations, there is a significant proportion of people with English as a second language. In places like Griffith and Mareeba, the Italian culture has a significant and pervasive impact. In other places, like Mt Isa and Lightning Ridge, there are many ethnic groups represented. Teachers and professionals working in these communities usually enjoy the cultural diversity evident in these locations.

In the more isolated and remote rural locations where the rural professional interacts with the dominant aboriginal culture, the process of adjustment and socialisation may be more difficult. Research by Crowther (1988) on teachers in aboriginal communities in rural Queensland and the Northern Territory suggested that the differences in cultural perspectives were one of the main contributory factors in the high turnover rate of these professionals.

The British Columbia scene is not too different from rural Queensland and Northern Territory. Canadians take pride in their individual cultural heritage. Rural communities are unique and foster their uniqueness. For example, each B.C. First Nations community has a different set of mores and customs from each other native community depending upon the Nation. It may be just as difficult for a native person from another tribe to become accepted in a community as for the urban trained Caucasian or Asian professional. In addition, several communities have been founded by particular religious groups. Prespatou, in Northern B.C., is a Mennonite farming community where modern technology is unacceptable. Argenta, in the Kootenays, is a Quaker community where children are Home Schooled through the Provincial Correspondence Branch. It is extremely difficult for an outside professional to be accepted by some of these communities.

So, the challenge in this variable to administrators, trainers and human resource managers can be framed as a series of questions.

1) How can appropriate personnel be selected and appointed to these multi-cultural communities?
2) What preparatory programs and experiences can be developed to sensitise professionals to these cultures?
3) Could the schools in the unique rural communities encourage pupils, at an early age, to becoming professionals in their own community when they are adults?
4) How could professional education programs provide some multicultural experiences to their undergraduate students?

3.0 Community

3.1 *Involvement/Integration*

The degree of integration into the local community in which the rural teacher and professional work is likely to exert an influence - possibly considerable – upon their preparedness to stay. Components of community integration include the degree of community appreciation of the professionals' work, the degree to which the community values the professional living locally, participating in community activities and programs, as well as perceptions of how the community regards and accepts the professional. No doubt all contribute to the influence a community exercises in the hearts and minds of its teachers and professionals. Boylan (1991) found that long-staying rural teachers believed, on the whole, their work was valued by their communities, their contributions to the community were valued and the community valued having the teacher living locally.

Additionally, the professionals' perceptions of whether they considered themselves to be 'a local', and were regarded as 'a local' by the community can be influential reasons in deciding to remain or leave. Boylan (1991) reported that the majority of long-staying rural teachers believed they were 'locals' and were regarded as locals by their communities. The evidence on this point of being 'a local' however, is not unequivocal. There was a proportion (9.1%) of these long-staying teachers who felt it better not to live within their school community.

Alexander and Bandy (1990) found that a supportive school administration was a significant factor in the successful acclimatisation of first year teachers in B.C. rural schools. Also, they noted:

> 'Almost twice as many first year teachers, who were raised in a village or rural area, reported a high level of satisfaction with their position than those who were raised in urban settings.' (Alexander and Bandy, 1990)

These factors should be appreciated by rural communities when they wish to integrate beginning professionals into their community.

Questions that arise from this aspect of community involvement/integration include -

1) How can communities help the professional feel welcome?
2) When does welcoming become prying?
3) What strategies can rural communities put in place to help the professional settle into the community?

3.2 *Adult Education*

One factor that is difficult for a professional to comprehend is that not all members of rural communities are literate. Schools often become 'community' schools and provide evening classes for adults. These community schools form the centre of the community life with both educational and cultural programs being offered. Rural professionals are 'roped into' offering sessions because they are usually the only 'experts' available.

Some questions that rural professionals need to consider are:

1) How willing are rural professionals to be involved in community education?
2) Is it fair for a community to expect a professional to play a leadership role in a community school?

4.0 Paraprofessionals

Well trained paraprofessionals in rural communities can do much to relieve the feeling of professional isolation for a newly appointed professional person to a rural position. However, not all paraprofessionals are trained. One teacher in the B.C. predominantly native community of Telegraph Creek stated that:

> 'I am a rural primary teacher with 11 native students and 1 non-native. 6 out of 12 of my students qualify for learning assistance and at least one requires professional counselling. Our school has no L.A. teacher. Our 'teachers' assistants' are unqualified members of the community' (Bandy and Boyer 1994, p26)

This teacher faced the integration of 'special needs' pupils without a trained assistant.

Similarly, in the medical community, nurses aides, home-care workers, paramedics (such as ambulance attendants) and counsellors play a vital role that often exceeds their level of expertise. For instance in the Cariboo-Chilcotin, the home-school co-ordinators are the only link with some of the parents whose children arrive in school speaking only the Chilcotin language.

In some remote rural Australian communities, where no professional is located eg. a doctor, some nurses are permitted to carry out simple procedural practices and prescribe/administer certain drugs pending the arrival of the Royal Flying Doctor.

On the outback station, the home tutor/governess takes on the 'para-teacher' role when supervising lessons of the children from either print based materials or interactive lessons via School of the Air radio, telematics or satellite delivery modes.

For the rural professional, it is important to work with any paraprofessional that is available. In some instances the professional may be required to train the paraprofessional.

Some questions that arise concerning rural professionals working with paraprofessionals successfully are:

1) How should paraprofessionals be recruited for rural areas?
2) Who should be responsible for ensuring that the paraprofessionals are adequately trained?
3) How could the work of paraprofessionals be monitored to ensure that they are not asked to work beyond their capabilities?

5.0 Government

Commonwealth and State governments have recognised the importance of providing professionals to the rural communities. Both levels of government operate targeted programs that focus on selecting potential professionals for rural appointments, assisting professionals to relocate into rural communities, supporting the work practices of the professionals and assisting with continuing education and training activities for these professional people.

In education, the Commonwealth government has initiated a range of programs that seek to enhance the educational opportunities of students in rural locations through programs such as the National Country Areas Program, the Disadvantaged Schools Project and the Students-at-Risk program. Even though these programs are focussed on students, teachers indirectly receive considerable support through the allocation of resources, improvement in telecommunications technology and the reduction in professional isolation.

At the State level in New South Wales the Rural Schools Plan (Metherell, 1989) has succeeded in identifying and training pre-service teachers for rural locations. These graduates ensure the continuity of schools and their programs in rural areas. In both Queensland and New South Wales the restructuring and decentralisation of distance education provision is another example of how state governments are committed to principles of educational equity and access for all rural people.

In medicine, the Royal Australian College of General Practitioners in association with the Commonwealth government operates the rural Vocational Training Program. In this program city trained doctors are offered the opportunity to participate in a rural general practice program that leads ultimately to becoming registered as a vocationally registered G.P. This program was initiated in response to political and social pressure resulting from the rural doctor shortage across Australia.

In Canada, the provision of professionals in rural and northern areas is complicated by jurisdictional issues. Licensing is very often provided by Provincial or Territorial governments and under the constitution the Federal government only can influence employment patterns by offering financial incentives. These take the form of special income tax deductions for service in northern latitudes and special northern living allowances to federal public servants. Under the Department of Northern Affairs, the federal government has an obligation to provide medical and educational services in the Territories. Higher salaries for professionals and paraprofessionals are used to recruit people to serve in these areas.

Key questions that Federal and State governments need to address include: –

1. How effective is the articulation between Federal and State funded programs?
2. What forms of support are appropriate to a) recruit and b) retain professionals in these rural areas?
3. How can rural professionals provide advice, comment or feedback to State or Federal departments that are often thousands of kilometres away?

6.0 Induction and Mentorship

The importance of induction and mentorship programs for beginning professionals has received attention in both urban and rural areas. Mentorship has long been recognised as even more vital to beginning rural practitioners to overcome the tremendous feeling of professional isolation that they experience in their first year. The literature lends overwhelming support for induction and mentorship programs for beginning teacher (Hirsh, 1990). Not only does the induction program benefit the beginning teacher but it also contributes to the professional development of the more experienced teacher who acts as a mentor (Killion, 1990). The British Columbia Government supplies some funding for districts that submit proposals for induction and mentorship programs.

Originally, many programs, such as the Induction Program developed by the rural school district of Sunshine Coast, were programs developed and implemented by school districts. The Sunshine Coast Induction Program, planned in conjunction with Malaspina College, was implemented in 1991 to meet the needs of new teachers in the district (Gleadow, 1992). The program included a district orientation day, three extra full inservice days, time to network with other teachers and an introduction to a wide variety of activities. The newer Mentorship programs are a result of the need for school-based programs rather than district-based. In the 1994 Nechako Mentorship program not only will new teachers be teamed with a compatible experienced teacher mentor but also mentorship is available to anyone who would like help due to:

i) a new position or assignment;

ii) new to the teaching profession (1 – 3 years); and

iii) a specific area of difficulty. (Nechako Mentorship Committee, 1994)

The Northern Territory education department conducts an induction program for newly appointed teachers that consists of a one week program conducted immediately before the school term starts. Additionally for teachers appointed to remote Aboriginals schools, there is a follow up program at the end of Term 1. In other state departments of education, beginning teacher induction programs, induction programs for teachers new to the region and programs for newly appointed executive teachers are regular features of the human resource management programs.

As Hirsh (1990) stated 'Beginning teachers want to derive personal satisfaction from teaching to develop professional competence, and to acquire a sense of community security'. Mentorship programs in rural areas will begin to provide this 'sense of community security'.

Questions that rural administrators in all professions need to ask are:

1) How can mentors be provided for new rural professionals?
2) Who should be recruited as a mentor for a rural professional?
3) What agency should provide the funding for a Mentorship program?
4) Should rural districts provide induction programs as well as mentorship for newly appointed professionals?

7.0 Preservice and Inservice

7.1 *Preservice*

With the decentralisation of Teacher Education Programs in British Columbia there are several exemplary programs for rural teachers. For example, the East Kootenay Teacher Education Program is a consortium program involving six rural school districts, East Kootenay Community College and the University of Victoria. Students are recruited from the local districts and receive all their training locally while completing a Bachelor of Education from the University of Victoria. Local instructors are teamed with UVic faculty members to deliver courses. In the 1994/95 academic year some of the courses will be delivered from campus through interactive television. All practica are completed in the local area; courses in Sociology include a rural component; methodology courses refer to locally developed curricular; and every effort is made by local districts to hire the graduates from the program.

In order for education students on-campus to learn about rural communities the B.C. Ministry of Education has provided funding each year since 1990, for the publication of a booklet entitled *Unique Opportunities: Teaching in Rural British Columbia*. Copies of the booklet are distributed to all education graduates from the three British Columbia universities. Also, Rural On-Campus Days occur at the University of British Columbia and the University of Victoria when rural school district personnel come to campus to speak to students and recruit them to complete their practica in rural areas.

Various rural Australian universities, such as Charles Sturt University, University of Southern Queensland, Edith Cowan University and James Cook University, have developed preservice education programs that have a specific focus on preparing rural teachers. These programs include typically on-campus courses that examine issues in rural sociology, teaching in rural and isolated schools, and using telecommunications technology in the design and delivery of lessons to remote sites (Boylan, 1994). Practical opportunities to engage in teaching rounds over a range of settings including small schools, isolated schools, aboriginal schools and distance education centres compliment the on-campus components of these programs.

More recently, the University of Queensland, Monash University and the University of New South Wales Medicine Faculties have instituted similar programs. Final year medicine students can select to undertake their resident's year in a rural base hospital within their respective state.

7.2 *Inservice*

Many British Columbia inservice programs for rural professionals are supplied through the Knowledge Network, a provincially funded television network. Programs are designed by government agencies, universities and colleges and are able to be received throughout B.C. via satellite or on a cablevision channel. Programs are both for credit towards degrees and for non-credit Professional Development or diploma programs. Interactive television is also available in many northern communities through the regional colleges. A similar program for health providers has been established recently in Australia using Commonwealth funding. Satellite technology is used to deliver continuing education programs to rural health practitioners.

Several issues are entwined in the inservice and continuing education variable for rural professionals. One central issue is whether it should be mandatory or voluntary. In education, social work, medicine and nursing in Australia continuing education is voluntary. In the legal profesion it is mandatory. This can create many anomalies. For example, Boylan (1991) found in his study of long-staying rural teachers 40.2% had completed a 2 year Teachers Certificate, 27.6% had completed a 3 year Diploma of Teaching and the balance (32.4%) completed a 4 year qualifications as their initial teacher preparation. Yet 72.9% reported that they had undertaken no further tertiary studies. Many had participated in short 1 – 3 day inservice courses but many had not. This finding raises the question of the professionalism of the practitioner.

In Australia continuing education of nurses is voluntary. The responsibility to maintain up to date knowledge, competencies and skills resides with the individual. This issue has received a significant amount of interest over the past 5 years. Rather than introduce mandatory inservice programs for nurses strategies that have been developed include:

i) establishing Centres for Professional Development in Health Sciences (Hase, 1990);

ii) creating a model for Nursing Practice Career developed by the South Australian Health Commission (Gaston, 1989);

iii) legislating through the Training Guarantee Act (1990) that employers must spend 1 25% of their budget on staff professional development;

iv) using award restructuring and multiskilling as means of promoting continuing education of nurses (Lok, 1992); and

v) establishing Rural health Training units to provide continuing education programs to rural health professionals, including nurses, in rural and isolated locations

It should be noted that in the USA, nineteen states require mandatory participation in nurse continuing education programs for licence renewal and continuing to be able to practise (Schlosser, Jones and Whatley, 1993)

Currently, the legal profession in New South Wales requires every solicitor to undertake 30 hours of continuing education each year to maintain the right to practise. Developments are occurring in the medicine area whereby those general practitioners who wish to maintain their vocationally registered G P status will be required to gain 170 points of accreditation based on continuing education points (150) and practice assessment points (20) over each three year period

Many questions arise concerning the issue of preservice and inservice programs

1) How can programs delivered at an urban university be adapted to the needs of rural practitioners?
2) Who should be selected to teach in programs for rural practitioners?
3) What aspects of rural sociology could be included in professional programs?
4) How could preservice and inservice programs be linked with mentorship?
5) Should participation in inservice education be a mandatory or voluntary component of continuing registration for the professional?
6) What are appropriate ways of providing access to continuing education for rural professionals?

Introduction to discussion groups

Every jurisdiction has to work within their own frames of reference, whether they be constitutional or financial. One of the objectives for the discussion groups that follows this keynote presentation will be to canvass local, regional and international opinions related to the problems of the *Education and Training for Rural Teachers and Professionals*. It is only through opportunities such as this conference that we can share strategies to address the issues that have been identified. We can take advantage of our shared knowledge of common problems and thus plan future directions on a more far reaching global scale

In the remaining one and a half hours of our discussion session, we have provided some questions for each sub-group to consider. We suggest that each sub-group starts with these questions and then adds other questions that relate to the particular variable from Figure 1. We look forward to hearing how your sub-group has addressed these and other questions.

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RURAL ISOLATION: TECHNOLOGIES FOR THE DELIVERY OF EDUCATION AND TRAINING

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ABSTRACT

In spite of there being talk of a shrinking planet and of the global village, there remain several limitations to the delivery of education and training in the rural and isolate areas of Australia. There are, however, continual developments in communications and information technologies, coupled with decreasing costs, and in the response of educational institutions which should provide all people regardless of location with easy and full access to education and training opportunities. What are these developments? What are the social and economic pressures which require that this access be provided? What are the infrastructures that need to be developed to ensure access? What are the barriers to such access? This paper will provide an overview of the delivery options that exist and raise the issues related to these questions for all participants in the group to discuss.

1. TYPES OF TECHNOLOGY OPTIONS FOR FLEXIBLE DELIVERY

Some common concepts and terminology are required to ensure a common understanding of the discussion in this paper. Because this is an emerging field, a variety of terminology is evolving for the same kinds of technology and practices. The following definitions and descriptions are based on examples from the literature and practice in Australia and overseas.

Each type of technology or medium has specific attributes which give it its power or effectiveness for certain purposes. Knowledge of these attributes will enable teachers and professional development program providers to design learning activities with strategies that make the most of these unique attributes. It is on this basis that categories and definitions must be formulated.

The term 'technology' has several uses in everyday language. It is frequently used to include the hardware that we design, construct and use – the artefacts of our society. It is also used to describe a class of processes that are algorithmic in nature – techniques for achieving certain outcomes. Frequently, these processes are used to produce artefacts/hardware. A third use is concerned with forms of organisation – networks, business and manufacturing structures that exist to support the production of artefacts and the use of algorithmic processes. These forms of organisation (global corporations, assembly lines, quality circles, etc) only exist because of the artefacts and processes. The three 'forms' of technology are symbiotic in nature, each feeding on and supporting the others.

There are two main categories of communications and information technology:

- distributive
  - postal services
  - broadcast radio
  - broadcast television
  - narrowcast radio or television
  - simulcasting
- interactive
  - telecommunications-based interactive communications and information technology such as teleconferencing (audio, audiographic and video),
  - computer-mediated communication(CMC), both real time (synchronous) and delayed (asynchronous), such as email, bulletin boards, computer-text conferencing, listservers, file transfer, access to databases and so on,
  - in-house workstation or computer-based Interactive Multimedia (IMM) systems, including laser disk and CD- ROM systems.

'Distributive' implies one way delivery with no immediate interaction between teacher/presenter and learners or among learners. What interaction that may occur is limited and usually subject to considerable delay. 'Interactive' refers to delivery modes which provide for immediate interaction among all participants in various ways, although with computer-mediated communication (CMC) this is usually asynchronous and therefore slightly delayed, but this can be seen as an advantage of this mode. With IMM, 'interactive' refers to the extent to which the user can engage with the courseware, and the nature of that engagement.

These types of technology are classified in this manner because of the implications of each category for design, production, delivery and costs of programs, particularly in terms of pedagogy and support services. The two categories, however, are not mutually exclusive in that various media may be combined, and the same transmission conduits can be used for both general educational and non-educational purposes, as well as for distributive and interactive programs.

2. DISTRIBUTIVE MODES

Correspondence education, on its own, has been found to be a second-best method of teaching for several reasons:

- There is a complete dependence on written correspondence lessons being sent to students by post, which results in a time lag of three to six weeks for the turn-around time for feedback on assignment work, or for requests for books from a library.
- There is little or no opportunity for live interaction between students and lecturers or students and students, except for individual telephone calls often at student expense, (and this is often impossible during daytime in any case), costly vacation/residential schools in some cases, or expensive lecturers' visits to regional centres.
- There is little or no opportunity for students to benefit educationally from live group interaction with their colleagues enrolled in the same subject.

What has occurred over the years is that 'correspondence' education was provided as a second best alternative for students not able to attend school or tertiary institutions simply because of geographical distance. Then it became possible to use audiovisual, communications and information technology to enhance those correspondence courses. Also, adequate, specially selected 'readings' were included to ensure there was less disadvantage due to not having access to a library. This may be described as a 'deficiency' model of distance education, where the use of resources/technologies was an attempt to make up for what was being missed by 'external' students not able to attend live classes. In recent years, however, distance education has attained a value added model which has to some extent resulted in the 'internal' or on-campus students actually being disadvantaged due to not having easy access to these same well-prepared resources. For this reason, the distance education/open learning/flexible delivery approach is now seen as being as applicable to on-campus students as for off-campus students.

Broadcast radio and television have been used for the delivery of both formal and informal education and training for many years around the world. In addition to broadcast, there is narrowcast radio or television which is so called because the transmission is aimed at a specific group of people rather than to the public, in general. There is also the enhancement of providing both radio and television programs simultaneously, presumably to enhance the audio, which is referred to as simulcasting.

There have been two significant developments in Australia with regard to broadcast television. Firstly, the Open Learning Agency of Australia Ltd. (OLAA), which was established through Monash University with federal government funding, uses the ABC for the broadcast television delivery of several of its undergraduate university subjects. The major advantage of this is that the ABC is the only delivery agency of its kind, in addition to Australia Post, which can provide nearly 100% coverage of the Australian population and, therefore, provide the most comprehensive access. In addition, as a result of the ABC's venture into South East Asia using the Indonesian Palapa satellite, these courses are now destined for overseas delivery. The second initiative is the Wollongong University Post-Graduate Education (PAGE) Consortium which has adopted the same kind of model as the OLAA using SBS for television transmission.

Normally, however, except for 'talk back' radio and television, this distributive mode assumes that there is no immediate interaction among presenters and learners, but there may be delayed interaction through correspondence and telephone, or there may be other opportunities for live interaction provided in the context of an overall program or as described above.

3. INTERACTIVE MODES

3.1 'Teleconferencing' is a generic term which encompasses all forms of interactive communication using electronic telecommunications between individuals and groups. In the early days of the technology this term included some reference to participants being at a distance from each other, and to a great extent this is still the case in most teleconferences, but geographic distance is no longer a main element or requirement for taking advantage of teleconferencing.

Following are brief descriptions of six types of teleconferencing.

3.1.1 Audioconferencing

Audioconferencing uses the telephone system for voice-only links between individuals and groups. There are various terms used for this type of teleconferencing such as a 'conference call' and, in the Australian media, a 'telephone hook-up'. The key items of equipment are loudspeaker telephones for hands-free and group participation at any given site and electronic bridges which connect any number of telephone lines together for simultaneous interaction.

The benefits, in terms of access, effectiveness and cost benefits for teaching, learning and organisational communications, have been well established throughout the world. It is the most accessible interactive medium available and it can provide major economies of scale if the programs are designed appropriately and there is adequate local support. Individuals and groups can be involved; subject specialists can be brought in for guest presentations; it is quicker to organise and set up than any other mode of delivery. When print, graphics and other audiovisual materials are provided, audioconferencing can be as complete as a face-to-face experience. Audioconferencing is also a major component of the 'audiographics' mode discussed below.

If the audioconferencing traffic warrants it, a school or cluster of schools may wish to consider purchasing its own audioconferencing bridge. This has been the case in Victorian state schools and the ACT Catholic schools. The 'ConferLink 6' bridge which links the calling site with five others can be purchased for about $9000. On top of this is the cost of the installation of five telephone lines (5 x $250 = $1250) and their annual rental, plus the cost of the calls made. A cost analysis will need to be undertaken to determine whether the audioconferencing traffic would warrant the purchase of a bridge. Each school should have at least one conference phone/terminal (about $500 to $1200 or $2000 each depending on type), as a first measure.

Many schools, both government and non-government, already have a loudspeaker telephone; some principals have them in their offices. There is no way of assessing how common these are in schools. In every community there can also be found such telephones and in many cases they can be borrowed for special occasions. All of the 37 Queensland Open Learning Centres and all Education and School Support Centres have audioconferencing facilities. In several regions, all state schools have been provided with loudspeaker telephones. All non-metropolitan state schools in SA have had loudspeaker phones for over 10 years (the 'DUCT', Diverse Use of Communication Technologies). Similar patterns can be found in the other states and territories.

Use of audioconferencing is widespread amongst schools throughout every other state for the whole range of applications. Teacher-librarians through the School Library Association of Queensland (SLAQ) began using audioconferencing for professional development programs in 1983 and have continued the practice, as well as extending it nationally, for government and non-government members alike. Also in Queensland, special applications with school students have included linking with children's' literature authors to interview them on their writings. Regional officers and Education Departments' head office personnel have been using audioconferencing regularly for almost 10 years. South Australian schools have been able to demonstrate its use for distance education in every aspect of the curriculum, including music, typing, LOTE, social studies, and so on, as well as for staff professional development.

Audioconferencing is one of the most feasible options for teaching and learning at a distance in terms of both cost and the preparation required for presenters and learners. Sharing of expertise among principals can commence immediately using this form of linking with minimal expenditure or reorganisation. Principals' associations should also consider making it policy that committees, project teams and other administrative/organisational groups use audioconferencing as a matter of course. Telecom's ConferLink service is the only public audioconferencing service available. There is the need for some training to ensure good practices are implemented from the start.

3.1.2 Audiographics conferencing

This mode also uses the telephone system or a very narrow band of telecommunications to transmit graphics and other visual images such as scanned still pictures. It is usually combined with an audioconference and may even use the same audio bridges for multipoint links, so that it has been referred to as 'enhanced audio'. Devices used include facsimiles, writing tablets or telewriters, electronic blackboards and whiteboards, freeze-frame or slow scan video, optical scanners and remote-controlled slide projectors. The latest addition is the 'Electroboard' or 'Liveboard' which permits interaction with a computer on a large touch-screen which can be multipointed through a data bridge.

In the past ten years most of these single-function units have become merged with integrated microcomputer systems which permit real-time multipoint sharing of graphics and other applications software among all participants. In some countries, including parts of Australia, the term 'telematics' has gained some prominence to refer to the audiographic configuration of microcomputer-facsimile-loudspeaker telephone as a teaching/learning station, although 'telematics' may refer to the whole range of telecommunications technology in some of the literature.

Computer-based audiographics provides the opportunity for real time (synchronous) graphics interaction combined with audioconferencing using the telephone network. This means that the cost of transmission is relatively low, but the preparation of materials is more involved than with audioconferencing alone and may require computer skills that are not commonly available. Also, because of the nature of computer-modem links, most software for audiographics provided for only a limited number of sites to be linked simultaneously. However, the MS-DOS *Vis-a-vis* software and the *Electroboard* system can link 32 or 64 sites simultaneously through a data bridge.

The Queensland Open Learning Network has provided audiographics systems in 20 of its Open Learning Centres, based on the *Vis-a-vis* software, and can provide a bridging service as well. The Queensland Rural Health Education Network has many sites equipped with the same system. About 300 Victorian schools have audiographic systems in place, based on the Macintosh-facsimile-loudspeaker telephone combination and this has been used extensively for curriculum sharing since 1988. Queensland has 23 classrooms with the same combination of technologies through a project called 'TeleLearning'. Western Australia is implementing the same system for the teaching of Japanese language for primary schools. The Northern Territory has a number of schools using Macintosh based audiographics systems as well. These state systems are using an Australian software product called *Electronic Classroom* to enable the Macintosh computers to interact in up to four locations simultaneously.

This form of audiographics is not only effective and feasible in the short term, it provides the basis for migration to desk-top computer videoconferencing as the technology evolves. That is, with the advent of computer-based videoconferencing at a relatively low price, it is likely that the audiographics functions will grow into and be used to support such videoconferencing rather than be seen as a service in its own right. This form interschool networking/sharing is therefore not only economical but will provide the basis for medium to long term developments in the technology.

Experience based on the TeleLearning trials in Queensland and the Telematics systems in Victoria found that the teachers and students involved had no difficulty in adjusting to this form of teaching/learning. Indeed it was determined that teachers who engaged in these projects found that their face-to-face classroom teaching improved significantly. Deakin University has adopted computer-based audiographics as part of their teacher training and have used it for teaching practice sessions.

Audiographics systems may be considered as a 'local' type of CMC in that they use similar technologies and can link in with the general computer-mediated communication (CMC) and interactive multimedia (IMM) options which are discussed below. In the short term, it would be advisable for principals to look at audioconferencing and audiographics plus computer-mediated communications as the first steps to electronic networking.

3.1.3 Computer-text conferencing

This form of communication has been traditionally called 'computer conferencing', but at present it is usually restricted to text only and in this way it differs from computer-based audiographics and computer-based videoconferencing systems. It uses specialised software which provides several more functions and controls than electronic mail or bulletin boards, but it uses the same technology, that is, microcomputers and modems communicating using a local area network, specialised telecommunications or through the telephone system using a computer to manage the communication. Although some computer-text conferencing software permits synchronous (real time 'chat mode') communication, the difference between this and other forms of teleconferencing is that it is mainly asynchronous and this attribute gives it its power, especially for international conferencing and communication among busy professionals. This form of communication may also be included in computer-mediated communication (CMC) as indicated below.

3.1.4 Interactive Satellite Television

The one-way satellite delivery of live video with two-way voice interaction via the telephone system has been used widely overseas and in Australia for curriculum delivery and professional development. In fact, aside from print and face-to-face, interactive satellite is the single most used technology for delivery of all levels of education and training in North America and Europe.

The cost of satellite videoconferencing delivery is based on the satellite charge of about $2000 to $3000 per hour, plus the cost of hiring the transmitting studio and receiving venues. Costs can vary depending on the time of day and whether bulk time is purchased. Pre-production is far more involved and costly than for audioconferencing or compressed videoconferencing. The crucial question with regard to this mode of delivery is whether economies of scale can be achieved, and experience shows that an audience of at least 300 or more is needed to make this form of delivery cost-effective.

Skychannel is a major commercial national carrier for this type delivery with about 7000 receiving sites in the pubs and clubs across the country. The federal Department of Social Security also has a network in place comprising 120 receiving sites in their offices throughout Australia. In WA, the Golden West Network reaches about 98% of the population outside of Perth, and with the Edith Cowan University initiative the programs can be made available in the Perth region as well ('Perth Educational Television' – PET). Edith Cowan University now produces about four hours of teachers' professional development this way each Friday.

In Victoria, Telecom has acquired Vistel (previously the Victorian government service) and the Victorian Directorate of School Education has just committed $4 million to provide a receiving dish for every one of its 2000 schools. It intends to use this state system for staff professional development, corporate briefings/information and curriculum delivery. During 1993 the Victorian Directorate of School Education produced over 100 hours of programming, including a course for teachers of Japanese. Cost analysis on some of the programs reveals a cost of between $5.00 and $10.00 per teacher for this form of professional development with the outcomes being just as good as for face-to-face seminars and workshops.

The Open Training and Education Network (OTEN) in NSW is transmitting satellite programs to 70 TAFE sites and some nationally; the NSW Schools of Distance Education have merged with it and OTEN is now in the process of providing all forms of curriculum and professional development programs for schools as well. In 1993, for example, a series of ten live interactive programs on *Managing for Quality* was received by 300 participants across Australia, including 66 principals in the Rockhampton region. A videotaped version will be transmitted in March 1994. OTEN is producing about four hours of original programming per week.

The TSN11 network in Queensland, operated by the state government, goes to about 300 public and semi-public sites, including several state schools. In recent times there have been fewer than 10 hours a week being produced, mainly because there is no contiguous network on the ground for any specific group of users. However, new developments indicate that all Open Learning Centres are being provided with receiving dishes, all major hospitals in Queensland will be acquiring receiving equipment and moves are underway in the Education Department to review the use of satellite as well as other technologies for school applications.

Four of the state based satellite providers and carriers (Qld, NSW, Victoria and WA) have started to collaborate on national delivery of professional development and other kinds of education and training programs and could prove to be a more affordable option than Skychannel in the near future, probably during 1995-96.

Educators and trainers should keep a watching brief on these developments and be prepared to respond in terms of acquiring the receiving equipment in their schools as programs become available. Reports from the Victorian and NSW Ministries of School Education indicate that a number of schools have already done so independently. The main issue here is the lack of advisory information for schools with regard to the acquisition of equipment to ensure both compatibility and flexibility. It should be noted, for example, that satellite receiving dishes need to be purchased with a 'steering' mechanism so that the dish can be rotated, repointed, to the various Optus satellites. For example, TSN11 and the ABC transmit via different satellites.

The design and conduct of teaching/learning programs using the interactive satellite delivery option requires not only pre-production and some professional assistance, but requires certain protocols and techniques to ensure effective participation by all those attending the various sites. The key elements to making the programs successful are the opportunities for interaction at the local site level and through the telephone line to the presenters at the originating site, but even more importantly through the effectiveness of the local site facilitator in providing local 'wraparound' for the participants/learners. The National Universities Teleconferencing Network (NUTN) in the USA has produced a set of standards for the application of interactive satellite television.

It is predicted that in the near future there will be an increase in the adoption of a 'subscription model' based on a fee per site (on a sliding scale, if necessary, depending on the size of the school/community). This is due to the devolution of authority and budgeting to schools in the state systems. Schools will then be in a position to determine which curriculum or professional development programs they wish to subscribe to and bring into the school. It may then also be up to the school to act as a local broker to resell the seats to local participants to recoup the fee and, perhaps, make a profit. This model is very common in the USA and Canada where schools and school districts subscribe to a satellite service to ensure a complete coverage of curriculum subjects for all their students. This option is used when the number of students who wish to take a specialised subject (eg Latin or Advanced Physics) is too small to warrant employing a full time teacher. One example of this type of service is the TI-IN network which has 16 full time teachers teaching over four channels transmitted out of San Antonio, Texas. During the summer months, particularly, the same infrastructure is used to provide staff professional development on a subscription basis and national programs using the best expertise available can cost about $12 per teacher for a full day workshop.

With satellite receiving dishes and other necessary equipment costing about $3000, it is feasible for a school to acquire these. However, at this stage there is very little school level curriculum being delivered via satellite and professional development programs are just beginning to be developed for this form of delivery. It is expected that satellite delivery will grow significantly over the next two to five years.

3.1.5 Analogue videoconferencing

This mode involves full motion interactive visual and audio communication using television systems such as optical fibre or cable, satellite, microwave, infrared or VHF radio signals to transmit the signals. Bridging more than two sites is usually difficult without very sophisticated switching equipment. The advantage of this form is that high quality video is transmitted.

The Catholic Education Office, Canberra and Goulburn, has now put in place a new initiative: Secondary Open Learning Access Network (SOLAN). This project is based on microwave technology which provides interactive videoconferencing at a reasonable cost to five systemic and three non-systemic Catholic High Schools and Colleges in the ACT. It provides an interactive teaching network that enables schools to access and share specialist educational offerings using distance learning techniques.

Another example is in Queensland where the Open Access Centre is trailing in the Central Region the use of VHF radio to transmit interactive videoconferencing. The range is up to 120 kilometres and it is literally free aside from the basic equipment. Users require an amateur radio license to transmit.

3.1.6 Compressed videoconferencing

There have been three major developments in recent years which make videoconferencing a feasible option for education. Firstly, the development of codecs (coder-decoders) enable the video signals to be compressed. A codec is computer-like in that it digitises the video input, compresses it and then transmits it via the ISDN network, a special service of the telecommunication carriers using the telephone network. The process allows the video signal to be transmitted along the equivalent of one or two telephone lines, whereas the normal analogue video which we see at home requires bandwidth equivalent to 1200 telephone lines. This compression saves cost and permits considerable flexibility with regard to the place and time for teleconferencing because it is much like a dial-up telephone call. Secondly, videoconferencing bridges now permit several sites to be linked simultaneously, like audioconferences. Finally, it is possible to link all forms of video devices (cameras, vcr, graphics scanners, etc) and computers through the technology.

Compressed videoconferencing may operate either on a point-to-point or multipoint basis where sites can be bridged through a 'Multipoint Control Unit' (MCU) (See diagrams, p 21). There are about 200 compressed videoconferencing sites in Australia and of these over 100 are in educational establishments. The number of sites will likely double by the end of 1994.

The Queensland network comprises 23 sites of which four belong to the Queensland government, four to the University of Central Queensland and 15 to the TAFE sector ('Videolinq'). During 1994 a trial involving Doomagee linked to Cairns and the NT Tanamai Network is underway. One application by the Education Department has been for interviewing principals for promotion without flying them to Brisbane. This system will be available during 1994 for trailing but there are costs involved for users outside of the TAFE system.

South Australian TAFE has the most well established network of 11 sites and 40 to 50 hours of training are being delivered per week. It has proven very successful in a range of courses, including both theoretical and practical skills development. The deaf have also found it a powerful way to communicate 'face-to-face' over distances using sign language.

Western Australia has also been considering a network of videoconferencing terminals and these will be associated with their 23 community 'telecentres' or open learning centres which are being combined with the telecottage concept (where people from the community can export work through the various technologies).

The cost of terminal equipment has been dropping rather dramatically. A 'room' system comprising a codec (coder-decoder) with video monitor and related equipment was between $100,000 and $150,000 during 1990-92. In mid-1993 this has dropped to about half that amount and is destined to drop even further over the next couple of years.

A more dramatic development in mid-1993 has been the introduction of both IBM and Apple Macintosh computer-based videoconferencing systems at a cost of about $13,000. These will become more widespread than the room systems and eventually form the basis of a totally integrated work and home communications unit. There are two limitations of the desktop videoconferencing systems at present: firstly, they operate on only a quarter of the size of a normal screen, even when projected on the large screen, and therefore provide a rather small picture suitable for only two or three people to view at a site; and secondly, most are not yet compatible with the room systems. The technology is expected to improve significantly over the next two years.

There are no consistent charges yet with regard to the use of site facilities, but in Queensland the fee has been set at $200 per site per hour. The line charges are twice the STD and ISD rates or about $70 per hour for the maximum distance in Australia and about $400 per hour for oveseas links. The bridge fee for 3 or more sites to be linked is $75 per port (line in) per hour.

Although the same kinds of techniques apply to compressed videoconferencing as to audioconferencing, there are many more possibilities for immediate visual inputs (graphics, slides, vcr, computer) as well as audio (eg telephone link in, audio tapes, etc.) so that preparation of programs can be more extended and require more resources if a range of these options are to be properly exploited. On the simplest level, however, it is possible to simply show up and talk to each other or hold a meeting as if everyone were in the same room.

An application which is becoming common is the use of compressed videoconferencing to bring into a state or national conference a guest speaker from overseas. This can be achieved for about $400 per hour for line charges, plus any charges for the use of the facilities at each site. By using large screen projectors and wireless microphones linked into the PA system it is possible for anyone in a large audience to ask questions directly of the presenter.

It is also possible to combine the use of compressed videoconferencing and interactive satellite videoconferencing. This has the advantage of being able to bring into a program either a guest presenter from somewhere in Australia or overseas, or to have a panel of specialists or participants in a number of sites which can see and hear each other and for that interchange to be then transmitted throughout the country, with the option of telephone interaction still available from those sites. Obviously, the more complex the technical arrangements the more costly the episode becomes and the more difficult it becomes to organise and control.

At the present costs and level of technological development it is probably not feasible for most schools to consider purchasing this type of technology in the short term, although at least one school in WA has put a system in place. It should, however, be a consideration if the computer-based audiographics equipment is purchased to ensure migration to videoconferencing in the near future.

Having clarified these various types of teleconferencing, it is now necessary to say that all of them are converging onto the microcomputer so that one reads of desk-top teleconferencing of all kinds being a reality. This is the result of video codecs, digitised audio and ISDN access being based on computer chips and cards. When that configuration is combined with satellite transmission and large-screen projection devices it is predictable that dial-up, multi-point, multimedia teleconferencing will be widely available within the next five years or so.

3.2 Computer-meditated communication (CMC)

There are at least five different types of service relevant to principals, their professional associations and schools, generally, that can be made available through such a system:

- electronic mail (email),
- bulletin boards,
- database/library access,

- computer-text conferencing, and
- file transfer.

Computer-text conferencing and audiographic forms of CMC have been discussed briefly above as forms of teleconferencing.

For organisational communications, email and bulletin boards are effective and inexpensive means of communications. Also, the asynchronous nature of the communication means that busy people can dial-up when it suits them to receive/send messages. In schools this is particularly important to overcome the timetable and timing problems inherent in synchronous teleconferencing systems. For principals this would appear to be an ideal form of communication for both formal and informal networking.

Through existing networks (eg Nexus, AARNet and Internet) it is possible now to access libraries anywhere in the world, to subscribe to electronic journals, to enrol and take courses from a number of universities and, to a limited extent with specialised access and software, to engage in real time videoconferencing.

3.3 Interactive Multimedia (IMM)

IMM courseware incorporates computer-based delivery of information in a range of forms which may include: text, graphic, sound, video (still or full motion), hence the 'multimedia' descriptor. It also usually provides the user with a range of ways of interacting with the material it contains and provides responses to user input in a manner appropriate to that input and the objectives of the material, hence 'interactive'. There are several ways in which this type of program can be stored and delivered such as laserdisk, CD-ROM and CDI as well as on hard disk drives and online servers.

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4. CRITERIA FOR CHOOSING DELIVERY OPTIONS

The choice of technology delivery options should be based on four decision-making considerations:

- needs of the learners
- objectives of the program and nature of the content
- choice of the provider/presenter/teacher
- feasibility of the options

The detailed criteria for determination of technology are as follows.

Needs of the learners

Personal needs: age, gender, abilities, learning styles, nature of employment and work patterns, nature of isolation, special personal needs, home responsibilities.

Access needs: location, distribution (geographic), disability, number (total and configuration of distribution), fees/costs to the learner,

Choice: types of programs/courses available, place, pace, time, timing, duration, individual or cohort preference.

Objectives of the program and nature of the content

Interaction and participation needs: level and type of interaction required among students and lecturers such as live (ie synchronous immediate/real time) versus delayed (asynchronous) interaction, level and type of student supervision required, optimum class size,

Content needs: need for audio, need for visual component, eg still graphics, colour and motion; type of knowledge, skills and attitudes needed to be acquired and demonstrated by the learners.

Choice of the provider/presenter

Lecturer's choice of mode.

Lecturer's confidence and skills in courseware design and modes of delivery.

Support for the lecturer.

Feasibility of the options

Access to equipment and systems for production and delivery.

Costs and availability of funds for production and delivery.

Local support for learners (eg tutoring, learning centres, information).

Institutional support (eg library services, production services, administration services).

Regardless of the sophistication of the technology, the quality of courseware and/or the quality of the educational experiences supported should be the major determinant for the implementation of any technology.

5. APPLICATIONS OF DELIVERY TECHNOLOGIES

There are many other terms in the literature referring to telecommunications, teleconferencing and technologies which really indicate types of applications rather than distinct types of teleconferencing. The prefix 'tele' is being added to many other words now to indicate the technology forms of communication: for example, **telemedicine, telework, telecommuting, telelearning, tele-training, tele-education, tele-meetings, tele-interviews, telemanagement,** just to name a few.

Applications can be thought of in six categories:

- **Education/training:** that is, active teaching and learning. With interactive technologies it is possible to import education and training to the learning setting (eg the principals' home, office or a learning support centre) as well as to export it ('distance teaching'), although the distinction between internal and external studies is now becoming a moot point. Furthermore, interactive technologies can empower learners to send as well as receive and to initiate their own professional peer-to-peer self-help links. With regard to professional development, using various delivery technologies not only facilitates equity of access to activities, it also can ensure the viability of some programs through economies of scale over a greater number of schools. Principals in small schools in the far north Gulf area of Queensland meet via audioconferencing every week on a Thursday afternoon to discuss common issues and provide peer-to-peer support. Professional development for teachers in Victoria is delivered by interactive satellite television on a regular basis. Edith Cowan University provides about four hours of teachers' professional development via satellite television every Friday.

  It should be mentioned here also that the use of the same infrastructures can apply to the sharing of common curriculum components and expertise. That is, expertise in one school or system can be used through the technology to deliver curriculum to students in other schools or systems; students themselves may also network and cooperate in their learning. For example: a music teacher in a Catholic primary school in Bundaberg has been teaching music via audioconferencing to children in another school in Monto; a high school mathematics teacher in Longreach is using Macintosh based audiographics to teach a single year 11 student in Winton; students all over Australia with access to 'Computer Pals Around the World' have been engaged in cooperative environmental projects; students with access to Keylink and Nexus electronic mail have interacted with Children's literature authors; Interactive Satellite Television is being used by schools in a number of states for the delivery of Japanese language.

- **Administration/management:** this includes meetings, interviews, briefings, project management, curriculum planning and development, product promotion and courseware production, etc. Administrative groups, committees and project teams are finding interactive technologies result in greater productivity and significant cost savings when used effectively. Professional associations with widely distributed membership have found that members can not only receive better services but can become involved in the activities of the association regardless of location. Communications technology can assist in networking people, eg principals, beginning teachers, teacher-librarians, computer specialists, etc, who have common goals or needs with a view to coordinating their work and providing specialist and peer-to-peer support. It can also assist in the senior administrators of systems providing briefings on policies and developments; for example, the Director of School Education in Victoria uses interactive satellite television to brief principals and teachers across the state simultaneously on policy developments. Regional directors of education in Queensland have met by audioconferencing for a number of years.

- **Services**: support services from specialists for such things as guidance, health services, legal advice, social and welfare services, counselling, advisory assistance, emergency services and information, eg databases, can be improved through the use of technologies. Expensive resources or services can also be shared among cluster schools and this would be applicable to both students and staff. School advisers and counsellors in a Queensland region link via audioconferencing with specialists in Brisbane to obtain guidance in testing of students in remote area schools. This can have important implications for the way in which principals can access support services for themselves and their schools.
- **Resources**: schools with access to the Internet can use remote library catalogues, subscribe to electronic journals, access databases and download teaching resources materials and software.
- **Research**: data collection (eg interviews), cooperative action research, exploratory analysis, assessing and processing outcomes, many with a view to educational improvement, have all employed these technologies. Principals and teachers have used these technologies to implement cooperatively new curriculum and policy developments.
- **Social/entertainment**: sports coordination, social interchange, games, family meetings, especially for special occasions, and general entertainment can be facilitated. Although not specifically applicable to principals' professional development, this is nevertheless an area of application.

Each of these areas of application can be subdivided and described in almost endless detail, but the important thing is that each of these five areas have a special set of techniques associated with the effective application of interactive technologies, particularly teleconferencing.

WORKSHOP REPORTS

Tuesday: Education

Group 1 - The Community and Contextualised Schooling: Processes and Principles

1. Governments and education systems should give priority to reknitting schools and the rural communities which they serve.
2. This Conference challenges the notion of curriculum as sacred cow. Curricula should be formed by the community in conjunction with professionals rather than having it delivered by the professionals.
3. Students should be active developers of the curriculum rather than being passive recipients.
4. Schools are a vital part of rural communities.
5. Local community knowledge and information should be incorporated into curriculum.
6. Support should be provided for teachers to help them learn how to weave local knowledge into the curriculum and to develop new skills appropriate to this knowledge.
7. Stop the erosion of rural community values through urban curriculum.
8. Ways should be explored to loosen school organisational structures and to improve the ways teachers interact with students.
9. Standardised testing does not allow rural students to display their abilities and achievements. Such tests are therefore another way in which urban values dominate rural students.
10. Opportunities should be provided for rural students to celebrate their achievements.

Group 2 - Access to Resources and Resource Sharing

1. Undergraduate courses should address rural issues.
2. Alabama Health Fair processes should be used across many professional areas in rural communities.
3. Mobile early childhood resources should be available in rural communities.
4. School networks/clusters should be established to support teachers in rural schools.
5. Education/Health professionals should establish community evenings for interacting with the community.
6. Parent development officers should be appointed in rural communities to assist parent groups.

Group 3 - Education and Training for Rural Teachers and Professionals

1. Teacher education courses need to develop skills to deal with change (personal, professional, practice, bridging courses pre-in-service).
2. All preservice teacher education courses should include exposure to current rural practice.
3. Universities should provide alternative entrance criteria for rural people. Measures other than TER should be used, and mature age entrants should receive credit for life experience.
4. Program delivery modes that provide rural people with easy access should be developed.

Group 4 - Rural Isolation: Technologies for the Delivery of Education and Training

1. That the definition of a standard telephone service be extended to include an adequate standard of data capability to include digital services and that systems be continually upgraded to ensure that rural and remote residents do not fall behind the standard services offered to urban residents.
2. The Conference encourages the federal governments to establish infrastructures for communications technology in rural and remote services as a social responsibility. This is seen as a prerequisite to any form of education, training and service delivery. The infrastructure should be built in such a way as to allow information to be shared among rural communities.
3. The Conference recommends that the Education, Health and Community Development sectors represented at this Conference work to form a coalition with other potential users to lobby for adequate information/technology structure for rural and remote areas.
4. Recommended that the federal government allocate financial resources to the country-wide development of compatible technologies to maximise the delivery of education and training to rural and remote areas.
5. There is a need to consider a means to empower rural and remote communities to utilise technology to support their needs and create networks of sharing between rural communities.

Group 5 - Indigenous Education & Indigenous Health (Thursday)

Primary Statements

1 If rurality is concerned with land usage, land, living space a place in human consciousness then by definition it must be recognised that indigenous people are RURAL.

Any policy emphasis on development, or facility which uses RURAL in its title, must therefore include an indigenous component.

2 In the context of global rural issues, one which directly affects indigenous people is the distribution of power.

Power is defined as the right to decide or to influence what happens to you, your family and your community either directly or indirectly. The capacity to share power with others who are dramatically different is very limited within all human species. However, until the sharing of power occurs as defined above, indigenous people will remain totally disadvantaged and on a welfare culture track.

3 To effectively acknowledge the important role of indigenous people in rural development, governments must observe the desires and opinions of indigenous people in developing any rural communities or policies in relation to rural development - even when these opinions are significantly different from mainstream views.

NB Inclusive NOT exclusive policy development

Recommendations

Indigenous appointments should be made to the offices of rural development at all levels of government.

All rural communities must be provided with access to secondary education services to:

(i) maintain families intact; and

(ii) ensure the continual development of rural communities economically and socially.

Establish indigenous university colleges as significant components in addressing the deprivation in rural communities regarding tertiary education access.

Government funds should be provided to support the employment of indigenous researchers on the staffs of specialist rural research and development centres.

PAPER PRESENTATIONS

RURAL DISADVANTAGE AND POST COMPULSORY PARTICIPATION IN EDUCATION AND TRAINING

Joan Abbott-Chapman — Australia

ABSTRACT

The paper explores the meaning of rurality and disadvantage as seen from the perspective of parents of Year 10 students in four rural municipalities in Tasmania. The research on which the Paper is based, funded by DEET, and conducted by a team within the Youth Education Studies Centre, investigated how parents own socio-economic and educational backgrounds are reflected in their goals, aspirations and intentions for their children at the post compulsory level – especially with regard to vocational and general education and as preparation for work. The author will also draw upon other studies in which she has been involved as Deputy Director of the Centre, of educational and social factors affecting post compulsory participation in education and training, which demonstrate the importance of goal setting, and expectations for study, in decision to continue to further and higher education.

1. Introduction to the study

The influence of parental educational choices and preferences have been discussed throughout the literature and most recently in relation to levels of parental education by Williams and colleagues at ACER (1993). Williams argues that as well as the status and "wealth" factors associated with educational levels achieved, the educational attainments of parents affect the educational decisions of their offspring.

> "Parents are models for such decisions, a knowledge resource, and a source of encouragement and advice for adolescents. As parents vary in their education, so too will the nature of the models to which children are exposed, their knowledge of education, and the kind of encouragement and advice provided". (Williams et al, 1993, pp. 41,42).

This Paper explores the meaning of rurality and disadvantage within this context as seen from the perspective of parents of Year 10 students in four rural municipalities in Tasmania, Australia, and investigates ways in which their own socio-economic and educational backgrounds are reflected in their goals, aspirations and intentions for their children within changing educational and socio-economic circumstances.

Rural parents' expectations of their children's education are discussed along with findings from the evaluation of the Commonwealth government's Students at Risk Program, both funded by the Department of Employment , Education and Training. The paper examines educational preferences and choices of rural parents within the context of their own educational experiences and values, and contests the widely held view that low post compulsory participation rates of rural and isolated students is mainly due to low values placed on education and training by their parents.

2. Rural disadvantage and post compulsory participation

Rurality is often discussed in relation to retention, especially in Tasmania. According to the definition used by the ABS, most of Tasmania's population (60%) is regarded as living in "rural" or "remote" areas, with only Hobart regarded as truly "urban". This high degree of rurality may help to explain Tasmania's very low retention rates right through to higher education. (Abbott-Chapman, Hughes and Wyld, 1989, 1991). In 1993 60.6% of Tasmanian secondary school students completed Year 12 compared with 76.6% nationally and second lowest to the Northern Territory.

The chances of students from rural and isolated areas of Australia going on with their education past Year 10 are significantly lower than for students from urban areas, especially the more affluent residential areas. Participation in higher education among people from remote areas in 1991 was less than half the participation rate of people from urban areas, and the participation rate for rural dwellers was about two thirds the participation rate of urban dwellers (DEET 1992). It will be difficult to achieve national objectives set for education and training for rural Australians. "Participation in higher education and TAFE by young non metropolitan adults to levels comparable with their metropolitan counterparts by 1995"(NBEET, 1991, p. xv).

Factors explaining lower participation levels at post-compulsory level include material disadvantage including financial and distance barriers, poor knowledge of and access to information and services, lack of stimulus and social opportunities, and parent and student preferences. (Cunningham et al, 1992 p. 1). A study by Abbott-Chapman, Hughes and Wyld in Tasmania (1991) has shown that rurality is an important factor in post compulsory participation right through to higher education level, especially in relation to social as well as physical access to educational and other facilities.

A comparison of 1981 and 1986 Year 10 cohorts within a longitudinal study of retention has however shown a significant increase in participation at post compulsory levels of young people in rural and remote areas, during the 1980s, an increase which has been most marked in the rural high schools and in the comprehensive District high schools. (Abbott-Chapman, Hughes and Wyld, 1991 pp. 77-81) This seems to reflect the impact of school programs on changing parental attitudes.

3. Parental preferences for post compulsory education in Tasmania

The research was funded by the Commonwealth government under the TASPACT agreement. This program, which involved a number of schools and secondary colleges throughout the State, aimed to identify ways in which post Year 10 retention in rural and disadvantaged areas may be increased, and to disseminate findings and recommendations in a way which will assist schools and colleges to put new initiatives in place. (Abbott-Chapman, Hughes and Wyld, 1992). Within this context, 140 in-depth structured interviews were conducted with parents of students who were at time of study attending four rural government high schools located in different regions of Tasmania.

The aim was to find out not only how rural parents perceive the benefits of post compulsory education/training for their children, and how informed or not they are about post Year 10 education and training options – but also to gain an insight into the family and community "culture" and values which help to define youthful ambitions, aspirations and expectations. Students expectations for themselves, or Perceived Personal Control, have been found in other studies to be especially important (Abbott-Chapman, Easthope and O'Connor, 1993).

Questions about length of family settlement in the area, attendance of parents and siblings at local schools, and attitudes to changes going on in rural communities, were included. A contextual study of socio-demographic indices (from ABS Census data) and changes in the municipalities in which the schools are set was also conducted. Our "snapshot" of rural life as seen through these parent interviews was taken during the second half of 1991, with final Report presented in 1992 (Choate, Cunningham, Abbott-Chapman and Hughes 1992).

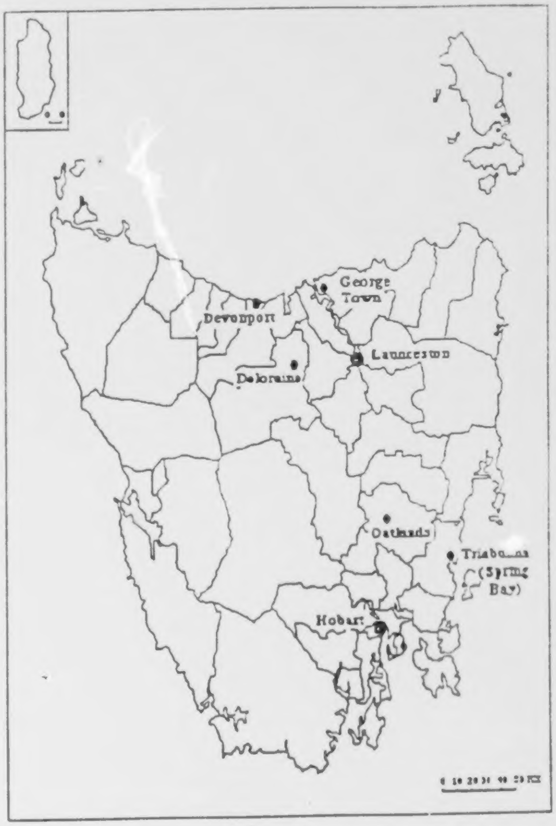
The picture emerging from the TASPACT and other retention studies draws our attention to the current problems of rural living, and of rural poverty, which impact upon the meaning which further and higher education have for students and their families within the rural areas. Findings from the evaluation of the Students at Risk program as it applies to rural areas(Abbott- Chapman & Patterson 1990, Patterson & Abbott-Chapman 1992) also draw attention to problems of rural disadvantage and the discrepancy between what parents regard as the "ideal" and "realistic" post school destinations for their children.

4. Portrait of the four Municipalities – the social and economic context

The four municipalities chosen for study - Oatlands, Spring Bay, Deloraine and George Town – represent typical rural areas in different regions of the State. Two of the municipalities have an almost entirely rural economic and employment structure – Oatlands and Deloraine. Two of them – Spring Bay and George Town have some manufacturing such as woodchipping (Triabunna) and smelting (George Town) and hence a somewhat more diverse economic and employment structure with slightly better job opportunities for young people.

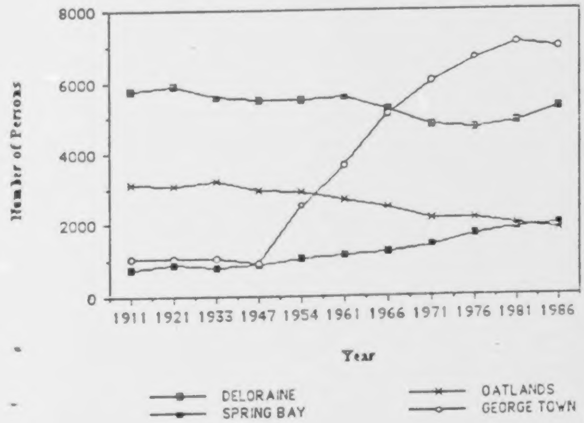
Nevertheless population trends in all areas have been characterised by out migration of young people in the search for jobs. While Deloraine has seen the beginning of an influx of urban commuters (to Launceston) seeking a rural lifestyle, Oatlands has not attracted such incomers and exhibits overall population decline. Spring Bay and George Town are two areas experiencing some growth in relation to industrial opportunities and/or the advent of tourism and holiday developments.

Figure 1: A Location Map of The Four Municipalities: Deloraine, George Town, Spring Bay and Oatlands



Population growth or decline is one index of community prosperity and vitality. Overall economic difficulties experienced in Tasmania have impacted strongly on these areas, but are being experienced differently in the four municipalities. Since 1964 the populations of Deloraine and Spring Bay have remained fairly stable with some increases over the last 15 years while Oatlands is slowly declining. George Town has experienced steady growth for forty years although there are signs of this recently slowing down due to threatened closure of the local industry.

Figure 2 Population Change For Four Local Government Areas



Previously the rural towns were highly self-sufficient and closely supportive but now with reduction in local educational and social services they are coming to rely more strongly on the larger outside centres for structural support. An increasing number of people are relying on governmental support for their very existence. The "old" patterns of social and economic relationship are breaking down, and close-knit parochialism is giving way to a social ambiguity in which young people find themselves trapped.

In Tasmania after secondary schooling to Year 10 within the government sector students must attend one of the 8 senior secondary colleges throughout the State if they wish to continue their education. Since these are in urban Centres – 4 in Hobart, 2 in Launceston, 1 in Burnie and 1 in Devonport, rural students must usually travel long distances or board out if they are to access these facilities. In times past moving away from the local area for education or employment was regarded with suspicion, but now we sense a greater willingness on the part of both students and parents to consider moving away from home to follow job opportunities and access education and training.

5. Survey of Parents of Year 10 Students

a) Parental educational and occupational background

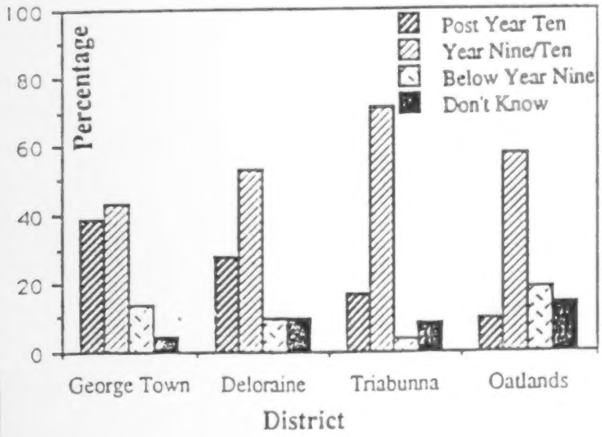
As numbers of Year 10 students, and their parents, were so small in each of the designated schools, and full school backing was given for the project, a high response rate was achieved. All parents of Year 10 students at Triabunna and Oatlands District High Schools were approached and just over 50% of parents in the two other schools. There were very few refusals, so that overall 57.9% of parents of Year 10 students in the four schools were interviewed either singly or together.

The majority of parents in our survey had lived in the same rural community for over 10 years - 65% in Deloraine, 89% in Georgetown, 77% in Triabunna and 74% in Oatlands. Many had extended family living in the district to whom they refer for support. In the four districts, however, only a minority of both mothers and fathers had attended the same school as their children – overall about 25%.

Patterns of parental educational levels in the four districts varied with regard to post compulsory education and training, although only a minority had gone beyond Year 10. Education levels attained reflect the social and economic characteristics of the districts.

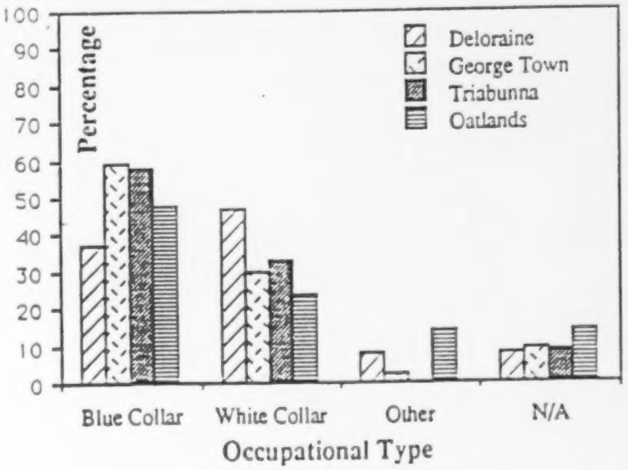
Mothers appeared more highly educated than fathers, especially in Georgetown and Deloraine, though we confine our analysis in this paper to fathers. Few of the older siblings of the students covered by the survey had participated in post-compulsory education and training and only 4.5% had entered university.

Figure 3 Fathers' Educational Level in The Four Districts



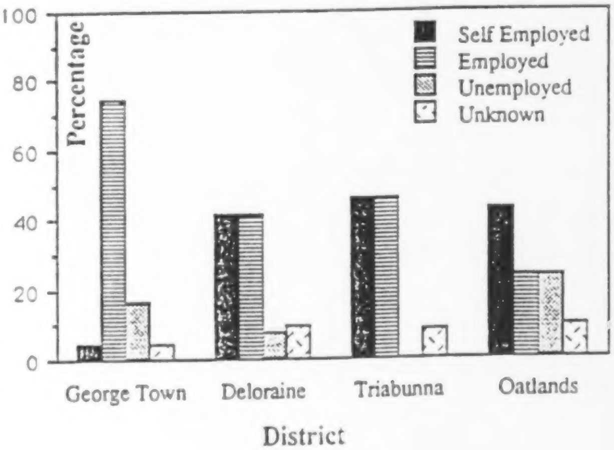
The fathers' occupations in the four districts also differed with fathers having more white collar occupations in Deloraine, both as a consequence of a more diverse labour market, and of more town commuters. Oatlands had the highest level of unemployment and the lowest level of white collar jobs, with most employment in primary industry. It also had the lowest income levels.

Figure 4 Condensed Scale – Fathers' Occupational Type in the Four Districts



The high proportions of self employed fathers in Deloraine, Triabunna and Oatlands reflect the high proportions of owner/managers of farms and smallholdings. In Georgetown the labour market is more mixed with more people working in industrial, commercial, trades and service enterprises.

Figure 5 Male Parents' Employment Status in the Four Districts

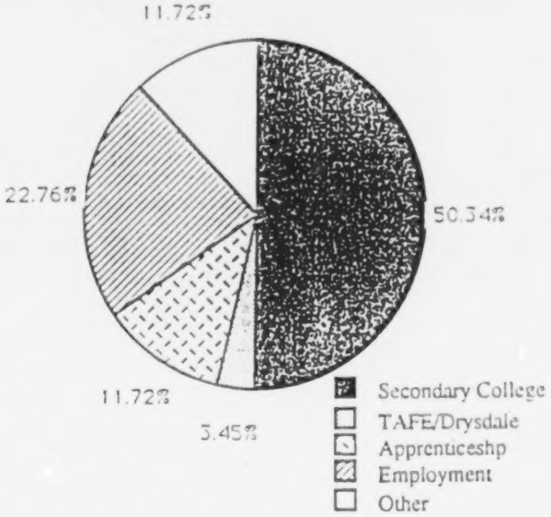


b) Post Year 10 Career and Educational Expectations

Parents were asked about their preferences for the post Year 10 destination of their child. The following pie chart illustrates the results. Attending a senior secondary college (general education in Years 11 and 12) was the most favoured choice with 50.3% of parents saying this is what ideally they would like to see their child doing after Year 10. There were however differences by municipality – 58.5% (Deloraine) 48.9% (Georgetown) 47.6%(Oatlands) and 37.5% (Triabunna).. Employment was the second most popular choice, followed by Apprenticeships, Traineeships and finally TAFE (Technical and Further Education).

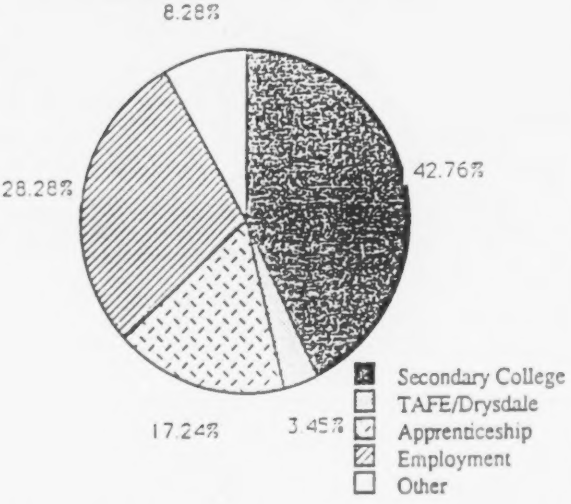
If we add together education and training of all types, including a mixture of work and study (under 'other') we can see that the first choice of parents for their children, despite their own limited educational experience, is overwhelmingly for some sort of education or training, rather than to go straight into a job.

Figure 6 Parents' Preferences for Their Year Ten Child in the Four Districts



According to the parents, a larger proportion of their children wanted to go straight into employment than their parents wanted for them. This is particularly true for Deloraine and Oatlands.

Figure 7 Student Preferences in the Four Districts – The Parents' View



As Figure 7 shows more students than parents also wanted vocational or technical training.

This paradox supports a similar trend noted in the research resulting from the Students at Risk (STAR) Program Evaluation.

> "....a higher choice by parents for continuing education-an average of 52.7% opting for the Secondary Colleges/Claremont Education Park and a further 8.3% for TAFE. This average is 61% overall compared with 48.6% of students. Conversely 30% of parents want to see their child get a job compared with 35% of students" (Abbott-Chapman and Patterson, 1990, p.33).

The pressure among disadvantaged rural students to leave Years 11 and 12 early to seek and/or get a job, even among academically achieving students, has also been noted by an ACER Report (1991) and by another of our studies of senior secondary school students.(Abbott-Chapman, Hughes and Wyld 1992) The desire for financial independence Yap (1991) and the prevalence of casual and part-time work among a substantial minority of secondary students was also highlighted.

c) Parents' views of tbe benefits and purposes of Education – ideal and reality.

General education is highly valued by the majority of the parent respondents in the four districts. A large proportion of parents (78.7%) think their children would benefit by going on to Years 11/12. This response represents the idealized preference toward education. The gap between idealized aspirations and actual intentions is evidenced by the fact that post Year 10 preferences do not reflect this orientation. Of the parents who think their children would benefit from Year 11, 40.5% preferred non study options, most of these preferring immediate employment or apprenticeships and on the job training. The evaluation of the students at Risk Program has found a similar discrepancy.

> "There appears to be a discrepancy here between a perception of the ideal, that is the benefits of staying on at school, and the reality in terms of actual intentions, as a fifth of the cohort, while perceiving the value of higher education, has not changed behaviour in response to this perception." (Abbott-Chapman and Paterson,1990,p. 20).

While 93% of parents agreed with the statement that "employers want better educated employees", 41% felt that "the best training occurs on the job". As many as 75% of parents in the TASPACT survey said that there would be real barriers standing in the way of their child going on with education and training past Year 10, whatever they themselves might prefer (Choate et. al.1992, p.92). The most quoted obstacle was "getting a job" (29%) followed by lack of interest in study or ability (15%) and finance (13%). Moving away from home was not seen as a barrier.in itself, but in terms of extra costs which would be incurred by the family.

Similar findings from the evaluation of the Students at Risk program highlighted the barriers posed to achievement of study goals by financial costs and pressure to get a job, along with need for practical advice and guidance from schools. "Within this context parents are more in favour of further education than might have been assumed and are sometimes more in favour than students." (Patterson & Abbott-Chapman, 1992 p.2).

When asked "What is the point of education?"37.9% of the respondents stated that the point of education was to "get a job", while 12.1% thought the point was to teach the fundamentals (reading, writing and arithmetic). Respondents from Triabunna and Oatlands had higher responses in these two areas. Many respondents simply answered the question by stating that education was "necessary". Most parents accepting the need for further education stressed it should be job related. Typical responses to the question, "What is the point of education?" included:

"I'm not sure it's worth while when it doesn't get you a job in the end."

"Academic skills are irrelevant, education needs to provide fundamental learning in reading writing and arithmetic."

"Education is preparation for work".

More parents in Deloraine and George Town held a broader perspective of the purposes of education including the provision of social and living skills, (45.1% and 38.6% respectively) compared with only 15% of parents from Triabunna and Oatlands. These patterns are associated with the educational and occupational differences between the four groups of parents. Parents in Deloraine and George Town are as we have seen more highly educated and are more likely to be white collar workers or skilled tradespersons than the other two groups. They also live nearer to a large town. Only 7.1% of parents overall saw education as 'broadening perspectives' and giving 'personal development'. The overwhelming perception therefore was that education is a means to a job and to getting along in society - 64.3% of responses fell into these two categories. However as Table 1 shows there is growing cynicism among rural parents about the degree to which education can help in getting jobs.

The "purpose" of education and preparation for employment is being called into question as there are no longer jobs at the end of the educational process. Respondents are informed and aware of the push towards further education and are asking, "Why, when the jobs are not there?". The promoted link between education and jobs is therefore a double edged sword when jobs cannot be assured. Parents who perceive the broader life enhancing purposes of education see the value of education for their children even when jobs are not available. A higher percentage of respondents listing employment preparation and the provision of fundamental skills and competencies as the general purpose of education, rather than personal development, thought Year 11/12 would not benefit their Year 10 child. (9% compared with 2%)

Table 1 Educational Purposes and Whether Child Benefits

Purposes	Benefits?							
	Yes	%	No	%	Not Sure	%	Total	%
Get a job	44	83.0	3	5.7	6	11.3	53	37.9
Life skills	38	80.9	1	2.1	8	17.0	47	33.6
Necessary	26	70.3	5	13.5	6	16.2	37	26.4
Not Known	2	66.6	1	33.3	0	0.0	3	2.1
Total	110	78.6	10	7.1	20	14.3	140	

These findings and others not quoted here suggest that parents with higher educational attainments themselves are more hopeful for their child's future educational and employment career, while parents with lower educational attainments whose own livelihood is under threat are more fearful for their child's future. Personal "agency" and socio-economic context interact in complex ways in decisions made.

"I'm worried. Unemployment here is high. For the first time we have a generation of non workers"

"I told my son if you get a job hang on to it - there aren't many jobs around"

"He hasn't enough experience yet to know what he wants to do and I don't know what to advise"

For other parents despite "the point" of education in terms of ensuring employment being unclear, it was still thought better for their children to go on with their education "rather than let them sit around at home unemployed". Many parents made a number of comments about local social and economic changes - not many of them for the better - which underlined the anxiety with which they and their children view the future.

"I hope the wool market settles down. We can't afford further education"

"What's the point of study when there aren't any jobs around in this area"

"I don't want to make her go on to further study - I expect she'll settle down and get married locally. She wouldn't want to work in the city"

"Well he'll just have to go where there is work, there are no jobs around here anymore"

There are no jobs available however many qualifications you've got"

Parental anxiety and pessimism about the local job situation influences students in their perceptions of the role of education and training. Nevertheless, a majority of parents (75%) in all districts said they wanted more information about Secondary Colleges. This has positive practical implications which underline the importance of parent liaison programs in schools. Parents indicated that information about courses offered, adequate supervision away from home at College, accommodation provision and information about AUSTUDY are priorities. Parents revealed they still had open minds on the issue of further education and were prepared to be supportive if questions could be answered by the schools and hence some of the "barriers" removed or reduced.

6. Conclusions – Impact of rural disadvantage on educational participation

Our findings suggest that although generally less educated than urban parents, parents of rural children are relatively open minded about the benefits of education and training even in a depressed youth job market, and are encouraging rather than discouraging their children to go on with their education and training. In some cases it is students rather than parents who are opting for employment over education.

A situation of socio economic decline and social change in Australian rural areas is associated with a growing awareness among parents that their children need more educational qualifications if they are to find jobs in an increasingly competitive youth job market, especially in rural areas.

There is however a discrepancy between what parents think would be good for their children and what they believe they will be able to achieve educationally and this is a product of barriers which rural poverty and disadvantage place on educational participation. Participation patterns are associated with a complex mix of factors both attitudinal and material, but it appears that the influence of material disadvantage factors cannot be underestimated.

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THE IMPACT OF CURRENT POLICY TRENDS IN EDUCATION ON RURAL COMMUNITIES AND THEIR SMALL SCHOOLS

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ABSTRACT

Globally, we are witnessing an increasing break down of economic systems, resulting in decreased government responsibility for health, welfare and education and increased demand on communities. Government policies in Australia are moving toward self managing schools that require strong community support and involvement. Current policy trends suggest that self managing schools will possess a degree of specialisation in administration and curriculum delivery that seems to depend upon a certain minimum size. The implication is that efficient self-managing schools will either be large, autonomous and self directing in administrative and educational arenas or conglomerates of small schools with a formal network of organisational linkages. In addition, self managing schools will be expected to establish strong community-school links. This paper puts the view that small rural schools have, in general, unique community-school links that may be destroyed by being forced to combine operations with other small schools. The alternative of school closure can devastate the small rural community. The paper examines four small rural schools in Victoria and examines the nature of their community-school partnerships. It describes the impact of policy changes on these communities. It suggests that policy planners need to be aware of the importance of the school to the small rural community.

INTRODUCTION

Changes in world economic markets and social patterns are putting new demands on education systems and the explosion in information technology has allowed the rate of change to those systems to be accelerated. Globally, we are witnessing an increasing break down of traditional economic systems, resulting in decreased government responsibility for health, welfare and education. Governments experiencing economic shortfall are trying to maintain and improve services for less money by increasing the demand on communities to support these areas of greatest public expenditure. Policy making in them is becoming increasingly politicised. Melbourne University's Professor Hedley Beare told The International Congress for School Effectiveness and Improvement held in Melbourne in January of this year that "Education policy-making has been taken out of the hands of the providers and increasingly put in the hands of those who understand economics, politics and business."

Government policies in Australia are moving toward self managing schools that require strong community support and involvement. The 1994 Congress for School Effectiveness and Improvement gave a clear message that "managerialism is on the ascendancy." (Education Age 11/1/94p 20) At the same congress, West Australian Professor Judith Chapman emphasised the increased demand on communities. "In a competitive environment it is claimed market pressure will work to force the school to use its resources in the most economically efficient way and to develop the educational product in accordance with consumer preference.... (However) the ideology of the market has led to certain conclusions. Chief of these is the notion that responsibility for the resourcing of education services should move away from the state and towards individuals functioning as buyers in the education market." These driving changes are demanding greater parent and community support in schools."

In Victoria, a major problem being experienced by educators is the rate at which change is being made. This has had a strong impact on small schools and their communities, as shown in the four case study schools in this paper. Moves toward self management have been taking place in Victoria over the past eight years. Reorganisation of the education system had led to the formation of districts which were asked to formulate solutions to the conflicting problems of providing quality education and reducing expenditure. Small schools had been targeted as economically inefficient. In October 1992 the Government changed and the process was speeded up considerably. Many schools were closed before the end of the year. The closures were preceded by a climate of rumour and uncertainty which affected confidence in small schools. Between 1985 and 1992 thirty five small primary and thirty three small secondary schools were closed which included fifty five at the end of 1992.

Shortly after election the new Victorian Government announced its Schools of the Future Proposal. From the preliminary proposals the future of small schools was cast in some doubt. "The Schools of the Future Proposals suggests that self managing schools will possess a degree of specialisation in administration and curriculum delivery that seems to depend upon a certain minimum size. The implication of this is that efficient self-managing schools will either be large, autonomous and self directing in administrative and educational arenas or conglomerates of small schools with a formal network of organisational linkages. In addition, self managing schools will be expected to establish strong community-school links." (Waterworth & Bowie 1993). During this same period the Minister announced that employment numbers in education would have to be cut significantly. The Government introduced and actively promoted Voluntary Separation Packages (VSPs). Staffing entitlements reduced and school principals were asked to name teachers in excess of the school entitlement. Teachers named in excess were placed in an excess pool and used to fill short term vacancies. New teachers were offered employment contracts for the school year as opposed to the calendar year.

In this climate of rapid change and budget reductions a range of school programs were put in doubt for the following year, 1993. Among those affecting small schools were shared specialist teacher programs and the mobile resource centres. A new policy was issued outlining how schools and the Department of School Education would examine current arrangements for curriculum and facilities and many schools were placed in Task Force groups to do this. An outcome of the Task Force process was the closure of 159 schools, with many schools annexed or merged, at the end of 1993. The policy document stated, within its three main justifications for its development, that " In rural areas, significant improvements to transport, roads and communications mean that many communities are no longer isolated as they once were." It also stated in this brief justification that "The consolidation of schools will lead to an extended period of stability, more viable schools and better provision of curriculum facilities." The implications that small school communities drew from the document was that small rural schools were likely to be at risk of closure or amalgamation. In the implementation of reorganisation and the accelerated move to self managing schools, three main policy trends can be discerned: a) the more economical use of scarce resources b) a move toward consolidation and c) an ambivalent emphasis on community.

SMALL SCHOOLS AND THEIR COMMUNITIES

This paper puts the view that small rural schools have, in general, unique community-school links. "School-community links are important, and improved links between schools and communities should be encouraged regardless of urban or rural location. In rural Australia, however, the links between school and community are particularly important and the interdependence is likely to be greater than in metropolitan areas. In provincial, and more especially, remote areas, the school is often the focal point of community life, as well as being important to the local economy. Likewise, the community can, and often must, contribute greatly to the work of the local school in order to improve the quality of schooling." (Australian Schools Commission, 1987, p. 22). Brown and Maisey (1980, 77) describe small schools "as prime examples of community involvement and suggest that they would make natural laboratories for community involvement in schools."

Small rural schools are generally vital to their communities in social and cultural terms, providing meeting places, sporting facilities, social and cultural functions and resources that support community educational purposes. The school involves the community in debate about educational issues and promotes community interest and a sense of community pride. The school also often employs local people and uses local trades people as well as spending money in the community. The location of the school in the community can determine travel patterns which support local trade. The school, as symbol of the small community, helps to maintain confidence and, conversely, its closure causes loss of community confidence and is often perceived as the symbolic end of the community. The teachers bring new ideas and skills to small communities and often influence the community beyond the school.

The Commonwealth Schools Commission Report of 1987 stated that "this position leads the Commission to take the view that school systems should keep small rural schools open, wherever possible, and that they should maintain and where feasible, even extend the network of schools throughout rural Australia." OECD research indicates that there is also a significant relationship between the strength of community involvement in the school and the definability of the community. When geographic integrity is put aside and children are brought together from other school communities, the level of involvement of parents at the consolidated school is considerably reduced (1980, 12) This vital school-community relationship may be destroyed by the schools being closed or forced to combine operations with other small schools. The rate at which change is applied to small rural communities can also damage community involvement. Small rural communities are traditionally conservative and generally monocultural which makes their resistance to change stronger. Any increased burden is spread over a relatively small number of community members or staff and it may take more time for new responsibilities to be accommodated and skills developed.

THE CASE STUDY SCHOOLS

This paper examines four case study schools in Victoria and describes the nature of their school-community relationship. It examines the impact of policy and describes some responses that the schools made to change and the rate of change. The author stresses that the policy budget cuts should be seen as distinct from the implementation of self management in schools. Both, however, are economically driven, particularly the rate at which self management is being implemented.

THE FIRST CASE STUDY SCHOOL

This is a small rural school, over one hundred years old, close to urban areas. The majority of families in the school community are located locally on farms, farmlets or large bush blocks. About one fifth of the families (four) come from nearby urban areas (up to 12 km. distance) and by pass large schools to bring their children to the small school. Some families have a long history of involvement with the school. The school grew to a three teacher school 16 years ago and maintained that entitlement until 1994 when it became a two teacher school. The school has been characterised over the last fifteen years by stable staffing, strong leadership and the active promotion of the school community relationship by school staff. Community involvement in the school is very strong and the school has a major role in communication in the district. It publishes a weekly newsletter for the school community and a monthly community version is delivered to every household by the local fire brigade. Many community groups and members use the school and its resources. The community is actively involved in curriculum support, fundraising works and maintenance.

The changes in policy impacted on this school in many ways. Rumoured at risk of closure in late 1992, the school survived following a vigorous campaign from the local community. The shared music specialist experienced a distressing period of uncertainty when the shared specialist entitlement for 1993 had been in doubt. This teacher had a number of years experience in small schools and had developed a high quality program in the three small schools which shared her as a specialist. Uncertainty increased about the future of her position. Rather than be placed in excess she applied for a voluntary redundancy package at the end of third term and was replaced by a casual replacement teacher.

The local School Support Centre closed during 1993. However, it was not used greatly by staff at this school, with the exception of the Visiting Teacher Service which supported two physically disabled students. This service was relocated and maintained active contact with the school. School support curriculum specialists were valued highly by school staff but the school had experienced a long period of stable staffing and curriculum programs were well developed. The head teacher's networks were affected by the staffing reductions and reorganisation but the length of time that the head teacher had been in the school ensured that they were extensive and this did not affect the school as much as the other case studies.

During 1993 the school was placed in a task force. The head teacher asked two community members to be the community representatives. Neither of these persons was on school council but was subsequently seconded to it. The school council accepted these representatives and thus the burden on the existing school council members was considerably less than in case study school number two since there was a broader distribution of responsibility. Despite efforts by the head teacher to minimise impact on his school community there was some loss of confidence in the community about the future of small schools. This affected the enrolment for the following year. Toward the end of 1993 it became apparent that the head teacher would have to name one of his two staff in excess. He expressed disillusionment with the changes being implemented and the rate of change. The head teacher and the infant teacher both applied for, and took, voluntary separation packages at the end of 1993. The middle school teacher, inexperienced at administration, took over as acting head teacher in 1994. The resignation of the long serving head teacher undermined confidence in the school community. Enrolments dropped by about 30%.

In January 1994 the new head teacher was given a list of teachers who had been placed in excess. He employed one of these teachers as the second teacher. This teacher worked for five school days and then became ill. She did not return to the school until the commencement of second term. The shared specialist entitlement was also in doubt at the commencement of 1994. Faced with numerous new responsibilities, the new head teacher delayed contacting other small schools to arrange sharing a specialist. By the time he did all other small schools in the district had filled their entitlement. He applied for the LOTE teacher, who worked in the school under a school council agreement, to be employed as the shared specialist entitlement for 1994 (this had reduced from .4 to .2) and this was arranged about four weeks into the school year.

The new head teacher is building networks for administrative support. A valuable network for this is the Head Teachers Association which shares small school concerns and is able to disseminate and clarify information relevant to small schools. This group has been formed by head teachers in response to the changes being thrust upon small schools. Another network which the case study school has joined is a cluster of five small schools in the area who will bring staff together for policy and curriculum development. This initiative has come from two small school teachers in the area. The case study school has also joined a larger sporting association and will combine with both small and large small schools in the district. This will increase the ability of the teachers to build networks.

The school council voted in 1993 not to join the Schools of Future Program. As information became available school community members expressed concerns about the level of expertise that may be demanded from school communities. In 1994 school council members expressed the view that the school would be more vulnerable unless it agreed to take part in the Program and school council voted to do this. The school will be part of the intake for 1995. The atmosphere of rapid change has been difficult. The school community strongly associates all changes and cost cutting with the Schools of the Future Program. They express concerns about a sinister motive which is aimed at small schools. Had the rate of change been slower, the ideas of self management may have been approached more positively by the school community.

THE SECOND CASE STUDY SCHOOL

This school is set in a small rural community bordering urban areas and has been a two teacher school for many years, although in 1992 it increased for the year to three teachers. The school is more than 120 years old. It is the only remaining community building or institution that identifies the district for which it is named and is surrounded by farms. The school experienced rapid growth some twenty years ago with the development of a housing estate five kilometres away. This increased teacher numbers to five for a few years until a large school was built on the estate. However, some families on the estate have preferred to send their children to the small, rural school and this has led to a distinct dichotomy in the school community. About half of the students now come from farms or farmlets close to the school and the rest live in an urban environment on the estate. There is strong community involvement in the school by both groups. For many years, until recently, the school had a male head teacher and there was expressed preference for this.

In 1991 a female head teacher was appointed and this led to expressions of concerns from a few parents from the conservative rural group. The school community has regular working bees and there is a pride taken by the community in the appearance of the school. Support in the school has tended to be divided into traditional male female roles and there is a mothers' club which oversees fundraising. The school council, occasionally termed the fathers club, has been traditionally made up of a majority of male parents but this is changing. The school community comes together for the annual concert and some social events. Parents are involved with reading, the swimming and sports program, excursions and computer studies. On a school day parents are seen walking casually in and out of the school buildings arranging fundraising, assisting with school programs, warming pies or just calling in for coffee. They convey a sense of a ownership of the school and there is family atmosphere among the students.

Towards the end of 1992 rumours of threatened closure encouraged the teachers at the school to strike to bring publicity to the school. They joined a state-wide strike on the 9th of November. The reaction from some of the more conservative rural group was to condemn the action of the teachers. Strong support, however, came from the urban group and this tended to factionalise the community. Tension within the community grew, as did criticism of the head teacher. This teacher was an experienced administrator and sought to inform and educate the school community about the implications of policy change and the shift in responsibility. Some members of the school community saw this as an abrogation of responsibility by the head teacher. The rapid rate of change had not allowed sufficient time for some members of the school community to accommodate the concepts of shifting responsibility.

This climate of rapid change, coupled with the amount of information that was being directed towards school communities, created uncertainty and tension within the school community. Threat of closure took its toll on parent confidence in the future of the school and the number student numbers reduced. As a result, the third teacher entitlement was lost early in 1993 and the head teacher was asked to name one of her two staff in excess. The teacher placed in excess suffered considerable loss of morale applied for and took a voluntary redundancy package later in the year. She criticised the rate at which change that had been forced upon the school and commented that it had contributed significantly to dividing the small school community. The teaching burden and administrative burden increased on the head teacher.

Reduced enrolments and the loss of the third teacher heightened tension as the school was seen as increasingly at risk. Had the changes been slower and the community given more time to accommodate them, tension would have been reduced. Within the school council meetings there was strong opposition to a works program proposed by the head teacher. Some members of the school community feared that applying for funding would increase the risk of closure. This led to further loss of cohesion in the school community and morale was very low among staff. In the first term of 1993 the head teacher applied for a voluntary redundancy package. The Ministry responded immediately and refused a request by the head teacher to finish the term. The head teacher was given a week to leave. The Infant teacher was offered the head teacher position but rejected the offer due to the tension within the community and the increasingly complex administrative burden. The position went to a teacher who had been placed in excess and was inexperienced at administration. This teacher was from an urban school setting and had no networks with other small school staff.

At a time when the staff needed maximum support, support services were considerably reduced. The local School Support Centre closed. Staff who were relocated at schools were difficult to access. Support networks were considerably depleted by loss of expertise through the number of Voluntary Redundancy Packages being taken. The local School Support Centre which had been providing valuable support in school-community relations, closed and some staff were relocated at schools. The regional centre, where the incoming head teacher had some networks, closed and new networks had to be established. Administrative burdens increased and the school community became involved. Much of the administration work was taken on voluntarily by members of the school council, increasing the burden upon them.

The school was placed in a task force in 1993 and this heightened the fear that closure was imminent. Community meetings were held and members of school council were finding themselves attending many meetings to develop strategies for survival and prepare their response to the Task Force. Fear of closure affected the morale of the whole school community and the teachers reported the effect was reflected in the classroom. A small number of children who were exhibiting problems were later, in fourth term, taken out of the school part-time and given private tutoring. In 1993 the .4 shared music specialist, the same specialist mentioned in the previous case study, applied for and took a Voluntary Separation Package in response to the pressure of changes. In 1994 the shared specialist entitlement was reduced from .4 to .2 under new staffing ratios. In 1994 the school linked with four other small schools in a shared specialist programme which, although halved in time, has established a wider network. The network gained from a shared specialist program is one of the most valuable that a small school can have because it opens channels of communications between schools and individual teachers. It gives some of the same benefits of a large school staff.

School communities were asked, in 1993, to discuss and vote on their school joining the Schools of the Future Project. The rate of change that had occurred had imposed greater burden on members of school council than would have occurred otherwise. This undermined the confidence with which the school community discussed the increased responsibilities implicit in the Project and several members of the school community expressed fears in this regard. This affected their approach to the self-management issue. Two valuable members of the school council left the school community sooner than would have been expected and school community members expressed the view that this had been, at least in part, due to the tensions and work load imposed by the rapid change. This may lead to a reluctance by members of the school community, to take on positions on school council. The school survived the Quality Provision Task Force which recommended that it stay open. The community voted to become part of the School of the Future Program in 1995 after much debate in school council and an earlier unanimous rejection of the proposal. Members of school council expressed fears that if the school did not join, it would be vulnerable to closure.

THE THIRD CASE STUDY SCHOOL

The third case study school is a one teacher school located in a small timber settlement. The small settlement has a small store which is opened for part of the week and the nearest town is 25 km away. The school community is considerably, economically disadvantaged. There is a history of three generations involvement with the school among some of the families. The school has enjoyed the support from the nearby mills and one mill provided a free bus for the school for all excursions. Although one wider community member was involved in the school teaching art in a voluntary capacity, community involvement in the school was unusually weak for a rural school. Most parents displayed a reluctance to be involved in the decision making processes being demanded of school communities and the school council had tended to "rubber stamp" policies drawn up by the teacher. The teacher of 1992 reported that no-one in the community was interested in sitting down and reading a curriculum or school policy with him. This teacher travelled to the school on Monday morning and left on Friday afternoon of each school week.

The teacher of 1993 settled in the community for the year, and the effect of this was apparently far more positive. The teacher did much to generate community-school interaction but much of this was running self-esteem programs and establishing support systems for the mothers of young children. The teacher produced a community newsletter through the school, called community meetings in the school, began to involve a small number of people actively in policy making and exhibited considerable entrepreneurial skills in gaining local government funding for community works and maintenance. However, this teacher reported that the majority of the community would only become involved in works in the school if they were paid to do it. There was a prevalent attitude that the school was the Government's responsibility, not that of members of the community. However, the school was also viewed as the heart of the community and most community social activity, limited though it was, took place there. The school community spoke of the school in terms of it defining and ensuring the existence of the community.

It could be concluded that the Region would be likely to recommend closure in early 1992 and this had generated a fierce opposition by the community. The teacher of 1992 helped direct the efforts of the community and the school stayed open. However, this teacher expressed the view that the Region would continue to actively consider closure of the school. He also expressed the personal view that the school should stay open because of the importance of it to the community. Because community involvement in school council was limited, the first major effect of policy change was felt by the teacher in 1993 and was the loss of the School Support Centre and break down of support networks. However, the Country Education Project (Victorian division of the Federal Country Areas Project) networks were unaffected and had been the greatest source of support for the teacher, apart from networks with other small schools in the area. The teacher expressed the view that the major value of the CEP network was that it was more positive and less judgemental than perhaps other support services. The school was placed in a task force in 1993. Despite having enrolments for 1994 in excess of minimum requirement, the outcome of the task force process was the closure of the school at the end of 1993. The children were relocated to the school in the nearest main town, 25 km away and a school bus provided. Parents expressed grave fears about the hazards of the bus route, which was used heavily by timber traffic, and of the time involved in travel for the children, most of whom were lower primary age. At the commencement of the year two families had already moved out of the small settlement to areas where their children would have better access to schooling.

Both the teachers of the two previous years and members of the school community expressed the view that the closure of the school would lead to the community disappearing, as had another timber community 25km away, following the closure of its school a few years earlier. Of particular interest is the social significance of the school. The majority of the community represented a very distinct and clearly defined sub-culture of timber workers and their families. They had a long family history (over 100 years) of living in the general area. This group were itinerant timber workers, many employed casually or part-time by mills in the area. As a group they exhibited considerable socio-economic disadvantage. Faced with the closure of their traditional communities their community support structures were diminished and they tended to drift to the large towns of the region where they lived as fringe dwellers in less positive situations which did not offer the support of their own communities. The other school that had closed in recent years had led to rapid disintegration of that settlement. Following closure the same thing was happening to this settlement, and its post office branch was recommended for closure. The positive community activities that took place in the settlement in 1993 and which were centred in, and generated by the school, indicate that closure of a small school in an area of socio-economic disadvantage can have far reaching consequences that are not immediately obvious.

THE FOURTH CASE STUDY SCHOOL

The fourth case study school is in a remote, alpine setting. In 1993 it was a two teacher school with a student population of 20 children. It has strong leadership and community support. The area is mountainous and heavily forested and journeys of a relatively short distance can be quite long in terms of time. The nearest store is 30 minutes drive away and the nearest main town is an hour away from the school and two hours for some residents. Children from the school must choose to either go interstate to high school (an hour and a half each way on the school bus) or to take private transport to the nearest Victorian secondary school, four hours away. The isolation of the school is a major problem in relation to access to support services.

Until the end of 1992 this school had always been a one teacher school. The major industries in the area are farming and timber, and most families are from a farming background or work in associated service industries. The population is relatively widespread across the valley and nearby tableland, either on farms or in very small settlements, definable only be signposts, although one has a few houses and a store. The settlement in which the school is located has only a few farm houses and a fire brigade shed. Despite the dispersion of settlement, there is a strong sense of community which is defined by, and its future ensured by, the presence of the school.

There is a strong history of community involvement in the school and the school and community are mutually interdependent. The local hall is next to the school and there is no fence in between. The hall supper room is also the school library and area for the storage of school music equipment. The school is located on the Hall Committee land and, until recently, when a new modular building was brought in, the supper room was used as the school. The school is used by the wider community three night per week for people doing distance education programs using the school telematics to communicate with TAFE colleges. Secondary students also use the technology for language subjects undertaken by distance education.

The school is the centre and major focus of the local community. Parents assist with reading and in other curriculum areas and are constantly visible in the school. The school is beautifully maintained by the local community and is viewed by them as community property rather than Government property. Fundraising for the school draws the community together and is often integrated with social activities such as a wine tasting. Twice each year the school holds a cake stall in a small tourist town near the New South Wales coast. Community members travel up to four hours to reach this location and often purchase each other's cakes. The day is seen as an outing for the community.

Due to its isolation, this school was placed in a task force. Isolation is most likely to ensure the continuing existence of this school. Policy changes have impacted strongly on the school in spite of this. The head teacher and community are becoming increasing aware of the responsibilities that are being shifted toward the community. There is a steady stream of faxes, executive memorandums and correspondence arriving at the school, which is largely directed toward the school council as well as staff. The head teacher tells of the significant increase in time being spent at school council meetings interpreting these communications and the implications they contain. Although the community is well aware of the need to be informed, the extent of the information coming and the shift in responsibility is worrying them and they have expressed their fears to the head teacher. Because of the remoteness of the school, staff changes take place about every two years and the head teacher will probably leave the school at the end of this year so every effort is being made by this teacher to educate the school community to handle the new demands being put on them. Given the isolation of the post and changes in policy that are making small school positions less attractive, it is not unlikely that the replacement teacher may be inexperienced in administration.

In mid-January 1994, the school council president was advised that the school would be able to keep both teachers of 1993. Up to this time the situation had been, because of a drop in enrolment from twenty to sixteen, and change in staffing entitlement policy, that the second teacher would either have to accept a point .2 position or part time staff would have to be found. The community was delighted with the news that they would retain their second and highly popular teacher in a full time position. This teacher had been under contract and was unwilling to continue in this mode. She had applied for numerous positions elsewhere and secured a private position on the day before school commenced. The head teacher requested a replacement and the response was that the school could no longer have two teachers because the wording of the agreement had been that the school could maintain their staff from 1993. Since one had left, the Ministry would not replace her. The head teacher secured a .2 shared specialist. This was, with vigorous lobbying from the community, increased to .3 and then .4 and by the third week of second term increased to .5.

Due to isolation, support services from the Ministry had been difficult to access. This difficulty increased during the past 20 months for two reasons. The networks that the teachers had built up with personnel in support services were broken down by people taking the Voluntary Retirement Package (Voluntary Separation Package) and by the closure of the Support Centres. Some personnel were relocated in schools. However, it became increasingly difficult and time consuming to access these people. The teacher would phone the school at which a person had been relocated and ask for the person. Someone would have to go looking for them. This process is time consuming, a luxury in a small school. Most of the loss is felt in the curriculum support area. Other informal networks between schools and teachers have been affected as experienced administrators have taken VRPs at a rate far greater than natural attrition. Changes in Federal Government policy, however, have worked in favour of this school. CEP funding has increased significantly this year, due to changes in entitlement criteria. The school gains under the new formula on the grounds of isolation and socio-economic disadvantage. The funding under the Disadvantaged Schools Program has also increased for this school in 1994.

DISCUSSION

Self management and small schools. Policy makers, planning for self management in schools, face what may be seen as two contradictory tasks; to increase the quality of schooling and to decrease the expenditure on it. These contradictions give rise to the ambivalent emphasi. on community. The case for self-management has been strongly argued in Australia and overseas (Caldwell and Spinks, 1988, passim.) Its success will depend on strong community-school links and community support. However, the implication in the self management design in Victoria is that schools will be "large enough to warrant a scale of complexity of operation beyond that available, or even necessary, for the effective management of a small school. Moreover, this concept seems to imply that the principal of a school of the future will have the seniority and status enabling a certain degree of management specialisation and that he or she would be supported by a team capable of working a complex educational and administrative structure" (Waterworth and Bowie, 1993.) Under this shadow, the future of small schools or the future of their autonomy, seems in doubt. If, as suggested in policy discourse, small schools cluster into conglomerates with a single form of leadership there will be a definite loss of autonomy. The ambiguity of the community emphasis in policy is obvious. To allow the school to be large enough to meet the self management model criteria, small school communities must be destroyed. Yet, to be successful as a self managing school, strong community support is essential.

Cultural issues affecting the response to change: Small rural school communities are by nature conservative and generally monocultural, making them more resistant to change than urban communities and they need more time to organise for and accommodate the burdens of change. The degree to which an administrator knows the community and encourages the spread of burden is important. In the first case study school the sharing of burden during the difficult period of the task force process meant less tension and insecurity in the school community than in case study two. In case study three the major burden fell on the teacher. This has some implications for the design of the information output, which has a cultural bias. The teacher in case study four, an isolated, rural community, reported 'a steady stream of faxes, executive memorandums and correspondence' arriving at the school and described extended hours in school council meetings interpreting these for the community. The discourse, if designed for an educated, urbane community may not be absorbed with confidence or clarity by members of other groups and will affect the enthusiasm with which the community becomes involved in the process of change. The task force process may have also favoured the more articulate and informed communities. The third case study school community may be seen to be disadvantaged by this. The first and second case study schools both had a highly skilled professional person as one of their two community representatives. Lack of empathy and information about the community's needs in case study three may have impacted on the outcome of task force process. The social and cultural importance of the school to this disadvantaged community might have been expected to merit far more support at the level of local, state and federal government than occurred.

In case study two, some members of the conservative rural group reacted unfavourably to the teachers' decision to strike. Some also questioned the leadership of the head teacher on the basis of gender. A few identified her attempts to explain the shift of responsibility toward community as a personal shift of responsibility which they felt characterised her gender. The communities of small rural schools are usually characterised by a far more distinct division into traditional gender roles than urban communities. There is often a prevalent attitude in the community that a male head teacher has more authority and is 'better able to handle the children'. The staff in case studies two and four both reported this attitude. The head teacher in case study four actively sought to alleviate fears in this direction by openly discussing the matter with the community. Community members reported being impressed with her communication skills and strength of character. It is likely that their rapid acceptance of her was also influenced by the isolation and difficulty of attracting a teacher to the position. While the community of case study four reported that the head teacher, who by necessity lived in the community, had a strong affinity for it, such a situation did not appear to develop in case study two where the teacher commuted daily from a suburban neighbourhood.

Case study two described a distinct dichotomy in the community which developed into factions as the pressure of change increased. The urban group was a less homogeneous group. In the face of rapid change, factions are often accentuated. One cultural group may be more receptive to change. During the task force process the leadership in debate in school council shifted perceptibly from the school council president, a local farmer, to the more articulate professional person from the urban group. Although highly committed, this school council president seemed to be intimidated by the discourse. He appeared despondent about the future of the school while the other parent appeared to remain motivated and optimistic. His despondency may reflect a disempowerment closely tied to the style of the discourse and perhaps to the cultural ability to accommodate change.

Social issues affecting the response to change: The effect of closure on the third case study school community is likely to be the disintegration of the community, as happened in the nearby school community of similar size and culture. The third case study community is representative of a disadvantaged socio-economic group. Social problems are best addressed within the support of a community situation. The movement of population out of the settlement will mean a loss of community support. Much of the support may have to be met by welfare services in large towns at a increased economic cost. The social effects of closure of a small rural school can be far reaching and long term.

In an effort to reduce the major area of expenditure in schools, the Victorian Government has significantly reduced staffing numbers through active promotion of the Voluntary Separation Package. In case study schools one and two, both the experienced head teachers, two of the classroom teachers and the shared specialist took Voluntary Separation Packages. In case study school four the experienced head teacher of 1992 took a voluntary Separation Package. These schools are a small sample but the loss of experienced small school administrators and staff is of major concern. Inexperienced administrators replaced two of these head teachers. All the case study schools reported losses to their networks of valuable and experienced education staff who had taken packages. One head teacher reported "You are told so and so knows all about that, so you ring up. Then you're told, "Sorry, but he or she has taken the package"." There is a considerable drain of skills and information leaving the school system and there appears to be no filtering to prevent or offset this.

The policy of requiring schools to name teachers in excess of entitlement coupled with the Voluntary Separation Package has been lauded by some within the community as a means of 'getting rid of the dead wood". However, it can be seen that in many cases, the reverse occurs and valuable staff are lost. Further, it assumes, often erroneously, that being named in excess is consistent with being an inefficient teacher. If however, a proportion of teachers named in excess have been nominated for reasons of inefficiency, then the placement of these teachers to fill positions in small schools is unlikely to contribute to the well being of the school community. The issue of contract employment also affected one of these schools. New teachers to the system may be less motivated to develop an affinity for the local community if, by nature of their short term contract, they are employed for the school year only.

A final social issue is that of networks. School Support Centres were eliminated in 1993 and a reduced number of support staff relocated in schools. These staff members have often been hard to access by small school staff because of the demand for their services. Coupled with loss of staff to the Voluntary Separation Packages this has affected every case study school. It can be seen and is well documented, that the more extensive the networks of support, the greater the resources are for coping with change. Of greatest value to small schools are the networks formed with other small schools of similar size. They share similar problems and experiences.

Another valuable growing network for small schools in Victoria has been the formation of the Head Teachers Association which accesses and disseminates information relevant to small schools. It is clear from the case studies that small school communities and their school councils need support services to help them cope with change. The CEP offers much of this support and has established exemplary networks for school communities but only two of the case study schools are eligible. Small rural schools near urban areas do not qualify although their needs may be as great. This policy of exclusion may change. However, if CEP funding is spread further, the schools already funded fear diminished levels of valuable support.

CONCLUSION

As the processes of self management and reorganisation are implemented, policy makers and those implementing policy need to be aware of the importance of the school to small rural communities. They also need to be informed about the situation and culture of each school community. Closure of small rural schools can have severe economic and social consequences for the communities that are serviced by them. Consolidation undermines the valuable school-community relationship and viability of small rural schools is dependent on this relationship. If clustering is a necessity of self-management, then the feasabilty of maintaining the integrity and autonomy of individual school communities should be considered. Perhaps a loose federation of school councils could be established within a cluster. Alternately sub-council groups could be established in each school or some local decision making process left with each school. The quality of community support that is characteristic of small rural communities, is directly related to a sense of identity and autonomy.

Policy makers must consider the powerful role that networks have in supporting schools in a climate of rapid change. In planning staffing entitlements, the role of the shared specialist has in linking small rural schools should be taken into account. Support services need to promote the ability of small schools to access their services. Networks are needed by small school communities and their school councils to assist in the dissemination and interpretation of information, and the addressing of rapid policy change. The information discourse that interprets policy change to small rural communities needs to be accessible. It should be in plain and concise language that can be readily negotiated by a wide audience, so that community debate is encouraged and the community feels empowered to respond.

In responding to the necessity of reducing staff, educational authorities must look at means of filtering the flow of personnel moving out of the system so that valuable skills and information are retained. The willingness of many to accept voluntary retirement packages may be a reflection of the value that educators place on their work in a climate of rapid change. If teachers are seen as appropriate judges of quality in education then it may be that they feel disempowered or that the changes to the educational structure have not been accompanied by gains in the quality of educational provision. The direct and indirect losses being incurred by small schools will impact on their continued viability.

One of the consequences of closure of small rural schools is the damage to rural communities that has been discussed in this paper. There may be other ways that governments can retain social cohesion and support communities if closure occurs. However, the alternatives may be more costly to governments than the maintenance of the school.

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BUILDING HUMAN RESOURCES FOR RURAL CHANGE

E.J.Woods, R.F.Fell, and J.A.Coutts — Australia

ABSTRACT

The institutions and practices of agricultural extension are changing to maintain relevance in the 1990s and also to meet the new challenges which face rural people. These challenges include the demands for greater consultation and participation by the clients and stakeholders of government services; changing patterns of services between the public and private sectors; new communication technologies and information services; and holistic approaches to facilitating community action on issues with production, marketing, resource management, and community satisfaction dimensions. These trends imply needs for new skills amongst extension professionals and for industry and community participants.

This paper examines the implications for training to effectively provide people with these new skills, using the case study of the Rural Extension Centre. New institutional structures and collaborations will enable clients and stakeholders to guide university level training in frameworks which fit professional roles and deliver immediate benefits to the participant and the employer. Linkages are being developed between previously separate services - extension services to rural people, tertiary education in extension, skills training in communication and rural leadership, and consultancies and research into extension processes. Critical issues of consultation, priority setting and evaluation are considered.

INTRODUCTION

The 1990's have been characterised as a decade of rapid change. Professionals working in agricultural extension and related occupations service rural people responding to the pressures of change. The changes facing extension professionals are from two main sources. Firstly, the nature of the issues facing rural people are changing. Secondly, the ways in which the profession delivers service and maintains the professional capacities of its members are changing.

Several key strategies are required to successfully work with rural people through the next decade. Rural people and extension professionals will require new skills. These include the ability to create new solutions, and to develop capacities for monitoring, evaluation and reflection which refine these solutions and give confidence to build on them further. New institutions, relationships and practices must also be developed to maintain viable rural communities into next century.

There are no established solutions to the new issues facing rural people, extension workers, or, in all probability, other professional groups working with rural people. The challenge of the 1990s is to adopt a self reliant, action learning approach, applying the necessary rigour to move forward with confidence.

THE CHANGING NEEDS OF RURAL PEOPLE, RURAL INDUSTRIES, AND RURAL COMMUNITIES

Declining relative economic importance of agriculture

For rural people in Australia, the last ten years have been extremely challenging. Undoubtedly the major challenge has been the continuing decline in the terms of trade for Australian agriculture. (For a concise summary see Henzell, Radcliffe, and Smith, 1993.) This has resulted in agriculture becoming proportionately less important as a contributor to Gross National Product, direct national employment, national exports, and other economic indicators (Jensen, 1993). The same trend is evident throughout the developed economies. In Australia, this effect has been exaggerated by distortions in world markets as a result of subsidised sales from the European Community and the United States.

In Queensland, the historically low commodity prices have combined with prolonged drought conditions to seriously weaken the economic position of agriculture . There has been substantial social dislocation (including stress, reduced access to education as financial pressure causes the withdrawal of children from boarding schools, and family separation as off-farm work is sought to provide basic sustenance). Significant structural adjustment can be expected in several industries in the next few years.

Declining agricultural workforce

The decline in relative economic importance of the agricultural production sector has been accompanied by declining numbers of people involved in the sector. Both result in a significant loss of the political power of farming people; *the voice of the bush* in public decision making has become faint. The sector has only limited capacity to oppose the impact of the general trends towards *user pays* and *smaller government* on services specific to their sector.

Declining numbers of people employed in agriculture and declining income from agriculture affect the population of rural non-farm people. Among key effects are loss of service infrastructures and social networks, inability within rural communities to adapt to change and to accept and handle benevolent government programs, and the delivery of specialist services in modes suited to urban but not rural people (Centre for International Economics, 1992).

The declining number of people involved in production agriculture also affects the way in which farming is viewed by the majority of the population. In the past, farming people were viewed as the backbone of Australia, a nation which *rode on the sheep's back*. In recent years, agricultural production methods have been viewed with suspicion. The use of farm chemicals is questioned as posing safety risks to agricultural products and the environment; animal welfare issues have been raised in regard to animal production techniques; and the off-farm effects of agriculture are viewed as a serious threat to the maintenance of significant natural resources such as the Barrier Reef. A declining number of people in agriculture must shoulder the role of being advocates for their industry, and of defending the value of their industries to the economy.

Facing complex problems

The progress of agriculture and agricultural research from a purely production orientation to a more holistic view has been widely documented. Agricultural producers, communities, and support professionals today face :

- the need to increase profitability in the face of declining terms of trade;
- the need to improve the long term sustainability of their production practices in response to increasing community concern for the environment;
- demands for marketing skills to identify market opportunities in lieu of statutory marketing arrangements, to practise quality assurance and world best practice, to produce reliably at the required time and quantity, in the face of variable weather conditions;
- the need to negotiate futures markets, variable currency exchange rates, and domestic demands for cheap, high quality production; and
- the realisation that agriculture is dependant on developments in other parts of the economy.

Trends to consultation and participation

Accompanying the trends to *user pays* and *small government* has been an increasing demand for accountability. One strategy to meet accountability requirements is to consult and negotiate with clients on high priority activities, and to encourage or require client participation in the delivery of services. In addition to reducing the chance that the services will be misdirected or irrelevant, consultation and participation increase client ownership of activities and the chance that the activity will be highly valued. However, these processes represent significant demands on the stretched resources of rural people. Rural people and extension workers also require new skills to participate in or facilitate these processes.

THE CHANGING ROLE OF EXTENSION PROFESSIONALS

Agricultural extension was first established in the US to increase the productivity of agriculture and improve the quality of life for rural people. The chief vehicle of extension in the US has been the Co-operative Extension Service through the Land Grant colleges. These colleges were established in 1914 and link the functions of education, research and extension. Co-operative Extension Service activities have addressed both agricultural and household/community issues affecting rural people, and the mode of operation has unashamedly focused on adult education. Recent years have seen debate on the breadth of activities undertaken by the extension service, as public funding has declined and the farming population has faced increasing pressure on their viability (Warner and Christenson, 1984).

Agricultural extension services in Australia were also established early this century but have had a relatively narrower technical focus, firstly on production and in more recent years, on resource management, business management, and marketing. The focus on technical subject matter has been accompanied by a tendency to operate in *transfer of technology* mode (Russell, Ison, Gamble, and Williams, 1989).

Recent reviews of institutional extension services in Australia have confirmed their contribution to agricultural progress but have generally identified opportunities for greater impact by increasing the focus of extension activities and the involvement of clients. The reviews have produced significant agreement that at least in principle, clients should pay for extension services which provide significant private benefits. This has the potential to encourage an expansion in the proportion of extension services provided through the private sector. (See, for example, Wythes, Woods, and Gleeson (1990), Watson, Hely, OlKeefe, Cary, Clark and Allen (1992), and McKinsey and Company (1992) for reviews of extension policy in Queensland, Victoria, and South Australia respectively.)

Key features of the new roles of extension workers include:

- a focus on achieving measurable outcomes and requirements for accountability;
- facilitating group processes to consult clients and other stakeholders, to define existing situations, and to involve stakeholders in extension processes;
- a systems orientation to deal with complex, multidimensional problems;
- working within a program framework in defined, limited term projects, often with funds from the rural research and development corporations;
- working with collaborators - across other technical disciplines, other organisations, and other groups within the rural sector;
- moving between roles in the public and private sectors, shifting technical focus to new priorities, and building a career on a series of short term projects.

KEY FUTURE STRATEGIES FOR RURAL PEOPLE AND FOR RURAL EXTENSION WORKERS

The changing roles and demands on rural people and extension workers were traced in the previous sections. Based on these expectations, we believe that key future strategies for individuals in both groups will be:

- developing a willingness to adapt to rapid change;
- developing self reliance and self direction as a learner;
- an action orientation (concerned with outcomes and achieving goals - personal, client, and / or organisational);
- collaboration;
- regular monitoring and evaluation;
- modelling constructive behaviour - a commitment to principles in action as well as in philosophy.

In the following section, these strategies will be examined in relation to a case study, the establishment and operation of the Rural Extension Centre, University of Queensland Gatton College.

CASE STUDY: THE RURAL EXTENSION CENTRE

The purpose of a case study is to illustrate principles or ideas more clearly through describing the processes and results of their enactment. The Rural Extension Centre (REC) was established in 1993 as a joint initiative of the Queensland Department of Primary Industries (DPI) and the University of Queensland (UQ). The choice of the REC for this case study is highly relevant since its establishment represented a willingness to adapt to rapid change by two institutions with a long history of involvement in agricultural extension.

From the DPI perspective, the Centre is an initiative under the new Extension Strategy (DPI, 1992) adopted by the Queensland government. This Extension Strategy envisaged that the REC would:

> provide a focus for the development of extension and the social sciences pertinent to the needs of rural communities.
>
> link with other institutions and organisations with an interest in rural extension...
>
> provide in-service training in extension methodologies and the social sciences, post-graduate extension training, and facilitate research in support of rural extension...
>
> provide a discipline focus for the (DPI) Regional Extension Specialists.
>
> (DPI, 1992; p 6)

From the University perspective, the Centre builds on a long history of involvement in agricultural extension education and on a vision to expand this involvement into a specialised centre with increased capacity to contribute to rapid changes facing rural people in general, and in particular, those working in rural extension.

In examining the strategies proposed in the previous section in relation to the REC, the analysis will be extremely preliminary in some cases. Our communication is intended to inform interested people of the directions we are exploring and the activities we are beginning. We are not keen to relearn the mistakes of others, we would prefer to avoid them by inviting others to contribute their hard-won wisdom. We are committed to collaboration and we seek potential partners. We have a commitment to learning and action, and in presenting this paper, we are modelling that behaviour.

Developing a willingness to adapt to rapid change

Patton (1993) identified evaluation and futuring as complementary approaches to develop effectiveness in the face of rapid change. The first component of evaluation is to test reality - to rigorously approach the issue of the current strengths and weaknesses, opportunities and threats facing rural people. In establishing the REC, a large group of potential stakeholders and clients were involved in focus group discussions in just such a process. They identified several issues of high current priority facing rural people and extension. These included:

- the economic crisis facing primary producers and the need for a greater business orientation;
- managing change and resolving issues which are wider than agricultural production or technology;
- providing farmers with skills to use information to make better decisions;
- improving the effectiveness of extension services, and

- developing and implementing effective new extension models to meet funding restrictions and other changes in the provision of extension.

This process led to the development of the Rural Extension Centreis mission statement, which is

to lead the development of extension as a professional activity assisting rural industries and communities to address major problems and opportunities for their sustainable development,

and to the recognition that this mission needed to be linked to a scope statement which made explicit a commitment to a wider focus than the traditional role of agricultural extension in the public sector.

The scope of the Centre is outlined as:

- **Clients:** People involved in extension in the public sector (Commonwealth, State, and Local government agencies), in the private sector (including agribusiness and consultants), in industry and community organisations, and students of agriculture and natural resource systems;
- **Activities:** Research, education, training, consultancy and practical extension activities;
- **Sustainable development:** Encompassing social, economic, and ecological aspects;
- **Integration:** A catalyst for integration of technical, management and social science skills;
- **Initial focus:** Extension services directed to people who are stakeholders in the use of agricultural and natural resources (industry bodies, producer groups, producers, relevant input and output industries and the associated communities);
- **Long term vision:** To contribute to the wide range of extension services which work with rural industries and communities;
- **Geographical scope:** To address key issues at regional, state, national and international levels.

The RECIs future directions are managed by a Board which includes representatives of UQ and DPI, but also members of stakeholder and client groups. One role of the Board is to regularly review the Centreis scope.

In doing so, the concept of futuring will be further developed. Patton (1993) described futuring as *constructing scenarios of possibilities, looking at their implications, monitoring trends and preparing ourselves for unknown possibilities so that as the future unfolds, we are ready for whatever occurs* (p.651). He points out that futuring is based on the assumption that the things we do now make a difference to the future, an assumption that is highly relevant to and consistent with the action orientation of extension.

Having considered the willingness to adapt to rapid change evident in the establishment of the REC and its key directions, two specific areas of activity - training for extension professionals, and linking with new communications technology - indicate how we are attempting to adapt.

Initial training activities have been based on consultation. Approximately 100 extension staff, extension managers, and other professional staff using extension related skills within DPI responded to a survey on their professional development needs in February 1993. Sixty-five percent of the extension staff who responded had no formal training in extension, and over 55% of all respondents were interested in undertaking further extension training.

The ten most frequent training needs identified by the respondents were (in rank order) : group facilitation, extension methodologies and theories, group dynamics, extension project management, computing skills, understanding adult education, project evaluation, information management, communication skills, and marketing/ business management. While all subgroups indicated common needs, non-graduates showed a higher preference for training in mass media and display, presentation, and social science skills. In response to a draft curriculum based on the core skills for roles outlined in the Extension Strategy, the three most highly favoured training modules were group facilitation, adult learning, and project evaluation. Over 56% of respondents were interested in taking a series of modules to form an accredited course.

The REC has responded by including the three most highly favoured topics in the first six months of its training program for extension professionals, which began in February 1994. All of the high priority training needs are being considered, with the exception of computer training, for which there are many alternate sources. A program within the framework of the Graduate Certificate/ Post-Graduate Diploma has been developed and accreditation is being sought within the University of Queensland.

A further, more comprehensive survey of extension staff within DPI is being conducted to clearly identify, by comparison with the results of a parallel survey conducted in 1987, how extension roles have changed and likely future needs for training. Similar studies of training needs within other client groups will be undertaken over the next two years. Possible groups include private sector extension related professionals, local government employees, rural research and development corporation members and employees, and community group leaders.

The final example in relation to adapting to rapid change is the issue of technological change. The information age has just begun to impact on many parts of remote Australia. New developments in telecommunications have placed reliable telephone services in remote Australia in the last 10 years (Barrow, 1987). Further technological advances are providing rural people with a whole new set of opportunities. The REC is exploring the possibilities in several ways.

Links through a Regional Extension Specialist with a federally funded telecentre development in Esk Shire, south east Queensland, provide the opportunity to gain some experience of its impact in an area of rural-urban interface. Resource use conflicts, changing social structures, new infrastructure needs are current issues and the impact of greater access to *outside* information is not clear cut. This activity links with a research interest in identifying the important components of quality of life for the rapidly increasing numbers of new residents in rural subdivisions, including social and infrastructure issues as well as the space and fresh air.

The Centre is also exploring a partnership with the CRC for Sustainable Cotton Production and the Distance Education Centre at the University of New England at Armidale. The initial aim will be to provide learning opportunities for the agronomists employed by consultants providing services to the cotton industry. Professional development opportunities for the extension related staff of private sector services are not well established, but will be critical to maintain responsible management of Australiais natural resources, and industries which are internationally competitive.

The unique feature of distance learning within extension is the commitment to linking learning and voluntary action to achieve planned outcomes. Extension does not focus on academic goals, but on the demonstrable achievement of outcomes such as improved lifestyles for rural people, more efficient and profitable agricultural production, and better management of natural resources. Hence a key question is the link between distance learning activities, taking action, and achieving outcomes at individual, industry and community levels.

Developing self reliance and self direction as a learner

The recognition of a global economy and the republican debate are two factors which highlight for Australians that nationally we are responsible for our own destiny. Links and groupings between nations are a means to ensure the type of future we desire, but our future prosperity is primarily in our own hands. The same philosophy is evident in policies as diverse as those for drought, where primary producers are to see management of natural disasters as their responsibility, and the policies for public sector employment, which clearly state that individual extension workers, like others employed in the public sector, are responsible for the development of their own careers.

We have encouraged individuals to focus on their learning behaviour in each of the REC courses to date. Our aim is that as well as acquiring a theoretical background and some practical skills in a high priority area, participants will have reviewed their own learning strategies and gained new insights to improve their capacities as self directed learners. Extension workers, like their clients, need to acknowledge that in an era of rapid change, next year will bring new and unique issues. These will require them to develop specific approaches based on past learning, but modified to the new situation.

For the same reason, a report prepared by the REC on Information Delivery Mechanisms contains bibliographies including all background literature as well as specific references. The aim is to provide maximum assistance to future learners. Much literature relevant to extension is contained in government papers and not included in traditional academic bibliographies. Consequently it is particularly difficult to locate extension references, so we have chosen a style designed to assist future use.

Action orientation

It is paradoxical that there is a focus on outcomes and achieving goals at the very time when many problems are recognised to be complex and unlikely to have clear solutions. The focus on outcomes does, however, link logically with a rapid pace of change. Unless action is linked to studying , describing and analysing problem situations, a study runs the risk of being outmoded by the time its results have been communicated to, and acted on by the relevant stakeholders. At best, some of the benefits of a study will have been foregone if beneficial results are not quickly converted to action.

The action orientation is familiar to extension with its emphasis on contributing to an improved quality of living. The emphasis on voluntary change means that to have rapid impact, extension activities need to align with the felt needs of people. We are attempting to enact the same principle in the training for extension professionals being offered through the REC. All subjects are offered as two intensive residential segments separated by a ten to twelve week period during which a relevant action learning project is undertaken. The aim is to link training with high priority activities already being undertaken by practising professionals. Learning is consolidated by planning, conducting, and reviewing field activities based on the learnings of the residential segments, followed by individual and joint reflection on the learnings from the activities undertaken.

In addition to assisting the learning of course participants, this activity makes visible to peers and managers the principles which the participant is testing, and contributes to wider review of professional practice. We also believe that the subject format provides those outside larger organisations or not in extension roles, but interested in acquiring extension related skills, with a temporary peer group with whom they can share and learn. Finally, the continuing process of adapting and refining extension approaches contributes to the professional capacity of REC staff, and through our communication, to a wider professional circle.

Where possible, we are seeking to link training with specific research or consultancy projects as well as fitting with the continuing work program of course participants. A recent course on conducting focus group research involved participants in a study of the use of green cane trash blanketing techniques by sugar producers. The issues involved in analysing and reporting qualitative data were much clearer to participants when they had collected the data themselves and knew the high levels of ownership and energy of focus group participants for their views.

Collaboration

The REC structure is collaborative by nature. It has a breadth of representation on its Board, and the capacity to add more core partners as well as to involve other groups in individual activities. Activities have been conducted in collaboration with the Bureau of Sugar Experimental Stations, with the rural research and development corporations, with several state government departments, with CSIRO, with private consultants, and with a rural womenıs organisation. As noted in the previous section, we are seeking opportunities wherever possible to link training and research, or training and consultation activities.

Key future challenges include:

- to explore wider boundaries for collaboration, outside the traditional partnerships in agricultural and resource management extension. This is pertinent within the university as well as with outside groups;
- to explore the mechanisms by which the contribution of individuals within participative and collaborative teams can be recognised and rewarded;
- to develop stronger links with the private sector extension activities;
- to improve the collaboration between technical experts, extension professionals, and clients of their work.

Monitoring and evaluation

A key role for the REC is to assist extension professionals to monitor and evaluate their activities. In a recent study of information delivery mechanisms for research project results in Australia conducted by the Centre, a lack of evaluation studies that related to stages of the problem solving process beyond awareness was identified. The distinction between evaluation that focuses on the number of people potentially aware of an opportunity, those actually aware, those implementing the new approach, and the impact of the change is critical. It appeared that most resources have been focused on the first two stages, and few on the later stages (Woods, Moll, Coutts, Clark and Ivin, in press). Similarly, Patton (1993) identified lack of evaluation as a frequent weakness of extension activities.

There is a clear role to work with extension professionals to develop more rigorous approaches to evaluation, as well as to institute the regular monitoring of the results of their activities which should guide the operational management of their projects. The REC will do this through its training activities. We are also exploring opportunities to assist community based initiatives such as Landcare and Integrated Catchment Management in the development of their evaluation processes.

At a more formal level, the REC will be involved in evaluating the impact of DPIıs Extension Strategy, both in the short term and the longer term. In the longer term, with greater emphasis on client consultation and participation, there should be growing links between the processes of planning, implementing, monitoring and evaluating. Activities with low perceived relevance should be less frequent, and there may be opportunities to fine-tune evaluation for the comparison of alternative approaches.

Within the Rural Extension Centreıs training activities, short term evaluations are already underway. Feedback from the first group of subjects, while generally positive, highlighted the following needs (in rank order): more group discussion and recap sessions, adjust depth and scope to participantsı starting points; include more examples and case studies; and ensure the course folder and readings are well organised. An important realisation has been that many extension professionals learn better by linking theory to action, rather than action to theory. The majority of extension professionals do not have any formal training in extension or recent contact with formal training opportunities. Their extension orientation is to action, and this is the mode in which they are most open to new insights.

Modelling constructive behaviours

In a world of rapid change, there is a need for cultural change as well as cognitive change. Talking about strategies to cope with change is important, but modelling these behaviours is a more powerful influence for the necessary cultural changes.

Most extension professionals are familiar and comfortable with the processes of planning, implementing and observing. Linking these processes with reflection and analysis is the basis for self directed learning to handle the future. This paper is part of the process of reflection, and analysing the RECıs progress, as was a short paper on extension training delivered to a workshop at the 1993

Australia-Pacific Extension Conference (Woods, 1993). The delivery of these papers at conferences enacts our commitment to collaboration and to inviting comment and participation. In developing our research program, we have similarly sought to involve as many local potential partners as possible, in a transparent workshop process of identifying and progressing priority issues.

CONCLUSION

We expect that the future will bring further rapid change. There will be continuing pressure on rural people to seek new ways to maintain happy and satisfying lives. New groups will develop and new relationships will form between those providing services to rural people. New technologies will offer the potential for better access to information and communications. The REC, like other organisations, will need to respond to these changes. Its aim is to maximise the contribution of extension to ensuring a better future, and to explore new ways in which this can occur.

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EVALUATING DISTANCE EDUCATION MATERIALS FOR RURAL AND REMOTE AUSTRALIA*

Dr Ian Gibson — Australia

Purpose

This research project involved an evaluation of the design, development and implementation practices employed in producing primary level distance education materials for use in Australia's outback.

Objectives

The project was designed to evaluate the quality and effectiveness of materials developed centrally for use in remote areas. The research focused upon:

1. The assumptions, intentions, processes and outcomes of the design and development of distance education materials at the primary level.
2. The processes of implementation of these distance education materials across three user groups:
    - students
    - home tutors
    - schools of distance education.
3. The outcomes of distance education study for learners and its intended and unintended consequences.

Summary of content

The materials currently being employed in the education of isolated children enrolled in schools of distance education are markedly different from those previously employed. This study attempted to isolate the principles and assumptions which governed the development of these materials in order to assess their quality and their success. The study then explored the similarities and differences between the assumptions and principles underlying the new materials and the needs of those who were responsible for their implementation and use. The investigation indicates areas which require modification in both the process used in development and the materials themselves. An evaluation designed to determine the effectiveness of the new materials in achieving their stated objectives completed the research approach.

**See Appendix 1*

RURAL RESERVATION/URBAN CROSS-CULTURAL TEACHER PREPARATION PROGRAM FOR AMERICAN INDIAN AND NON-INDIAN TEACHER TRAINEES

Laura B. Smolkin and Joseph H. Suina — United States of America

In her weekly self-evaluation, Julie, self-described as "a little Jewish girl from New York," ponders her first week at the Bureau of Indian Affairs Laguna Elementary School.

> What was most important for me this week was the experiencing of being in a monocultural room again. When I taught Hebrew school, that was the last time. I was reminded of the need to know 'the ways," and extending the feeling to the students that I "understood." I don't really, and it's certainly more difficult than being in the Hebrew school, since

> I'm part of that culture. But I feel close to them because I feel close to Kelly [her Indian partner]. I am confused about adapting to my new environment. sometimes feel the need to be on the defensive, I sometimes feel overly naive. I even sometimes feel like I don't belong.

Julie is a member of a new teacher preparation effort at the University of New Mexico which seeks to better prepare teachers for the diversity they will find in today's schools. In his 1993 special report "Educating Teachers for Cultural Diversity", Kenneth Zeichner reviews pertinent literature, outlining critical aspects of the preparation of teachers in America. Pointing out the mismatch between the' preservice teacher population and the students they are likely to teach, Zeichner explains that most teacher education students are white, female, monolingual with "very limited interracial and intercultural experience." According to Burstein and Cabello (1989), the percentage of minority (non-white) teachers has been declining significantly over the past decade, Colleges of Education, then, which wish to adequately prepare teachers for the populations that they are likely to teach, appear to need a two-pronged approach in their teacher preparation programs. The first, clearly, is to better prepare the middle-class, white, female students who desire teaching as a career. The second, equally important, is to recruit, and retain, individuals from non-white communities. Wilson (1991) suggests that in order to accomplish this goal, universities must provide a "nurturing culture." In this paper, we describe a program created at the University of New Mexico which sought to achieve both the above mentioned goals, by focusing on American Indian students.

American Indians of New Mexico

New Mexico is home to three major American Indian groups the Navajo the PineDos, and the Apache. The Navajo and Apache, both Athabascan-speaking, nomadic tribes migrated into the Southwestern United States approximately 450 years ago. The Pueblos, descendants of the Anasazi cliff dwellers, were indigenous to this region hundreds of years before the appearance of other tribes or European conquerors (see Dutton, 1983). While the influence of the dominant, Euro-American society is clearly visible in terms of material possessions and subsistence patterns, traditional values and processes of Pueblo enculturation remain intact. The same may be said of the Navajo peoples, particularly those who live in remote rural settings, although increasing Native language loss is being reported for all New Mexico Indian groups.

Indian Teacher Preparation Efforts at the University of New Mexico

From the early 1970's through the early 1980's, the College of Education of the University of New Mexico offered on-site teacher education programs for the Pueblos, Apaches, and Navajos of New Mexico and parts of Arizona. For many American Indians, these federally funded programs, available within short distances of their homes, afforded their first, and for some, their only opportunity for higher education. Well over 100 Pueblo and Apache students received their degrees in teaching. For the Navajos a considerably larger tribe, more than 400 students graduated as teachers. With the introduction of Reaganomics, federal support for these programs halted abruptly.

Given that schools are the largest employers on most reservations, this programs yielded considerable benefits for individuals and their tribes. A survey of Pueblo program graduates (Suina & Becker, 1991) indicated that well over 80% were still engaged in Indian education, on or near their reservations. Two former teaching assistants now serve as principals of schools, while many others serve in key tribal leadership roles. While there has been criticism of the strength of the University-delivered curriculum in terms of preparing teachers to provide culturally- relevant teaching (e.g., Ladson-Billings, 1992), no one has questioned the professional development of the involved individuals, nor the impact the programs have had on each of the tribes involved. However, despite the outcomes of these programs, Native teachers still comprise only 2% of the state's teaching force, while American Indian students constitute 10.4% of New Mexico's public school population.

A second survey (Suina & Becker, 1993) was conducted with 36 former, unfinished students to determine the reasons for their incomplete course work. Completion rate of questionnaires was 66 percent. Asked why they had not completed their programs, 18 of 24 indicated that they lacked financial support. Additional reasons included family responsibilities, village responsibilities, and lack of transportation. Asked what support would be needed for them to complete their programs of study, 20 of the 24 cited financial support, while 15 of 24 mentioned academic support. The need for emotional support was also mentioned. Ten of the 24 indicated that fear of failing the National Teacher Exam kept was an additional factor for their incomplete programs.

Teacher Preparation for non-Indians at the University of New Mexico

The University of New Mexico's College of Education has received numerous awards for its innovative teacher preparation programs. Key to these awards has been a long-standing collaborative program with the Albuquerque Public Schools, the state's largest school district within which the University is physically located. For approximately twenty years, students have prepared through a "blocked" program of methods courses. Issues of cultural diversity received attention during the first semester through intermittent presentations on topics such as traditional values, bilingual education, research on teacher treatment of minority students, multicultural children's literature, etc. Such presentations Were completely absent during the math and science methods block. All student teaching took place within the Albuquerque Public School settings, where most students found employment upon completion of their degrees. In terms of teacher preparation programs, the block preparation for diversity would be seen as a segregated, or "add-on" program (Bennett, 1988).

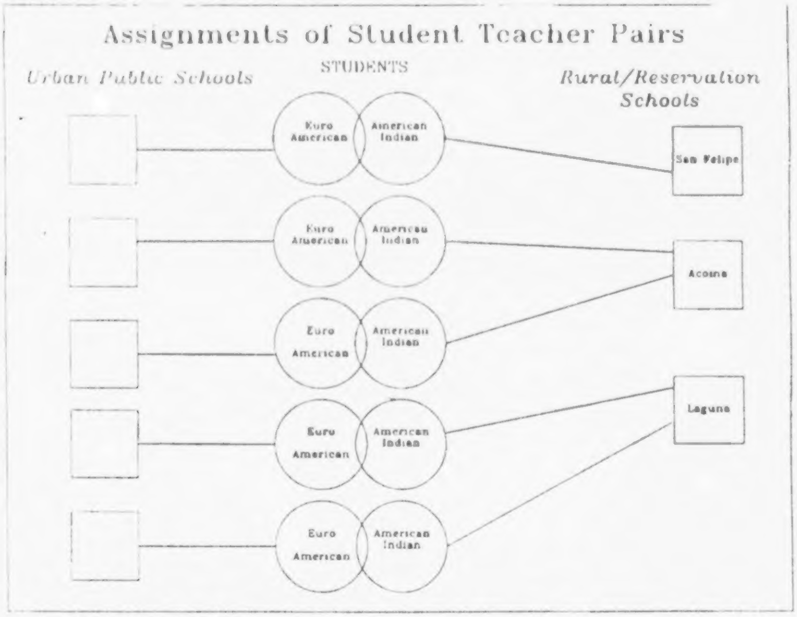
While the program included a student teaching population of between twenty to thirty percent Hispanic-Americans, most semesters found no Indian students present. In general, then, the University's program was quite similar to the situation described in the introduction, with high numbers of Euro-American graduates.

Designing a New Program

Given the two-pronged approach described in the introduction, with considerable attention to the existing literature on preparing teachers for diversity, We created a three phased model. We were firmly committed to the belief that teacher education is not localized to preservice experiences, but extends throughout the career of the classroom teacher. Maintaining that work with student teachers should enhance inservice teachers' professional growth, we decided to create, rather than a professional development school (PbS) (e.g., Holmes Group, 1990), a professional development community instead. This community would extend beyond the borders of the Albuquerque Public School district into the reservation schools of the Southern Pueblos Agency, and would bring together master teachers who worked in both rural/reservation settings with those who worked in Albuquerque's urban and suburban populations. These mentor teachers were to spend a semester, Phase I, discussing the preparation of future teachers, given the settings and communities within which the preservice teachers were to be placed. These discussions were to take place during weekly meetings and over electronic mail as well.

Phases II and III represented the preservice teachers' classroom teaching experiences. We chose to employ what Zeichner (1993) refers to as an integrated approach, in which we would focus, through field experience, "on preparing teachers to educate a variety of different groups of students of color" (p. 13). We opted for student teacher partnerships, to consist of one student from the dominant society, in New Mexico consisting of both Euro- and Hispanic-Americans, and one student from the minority culture, American Indians. During one semester, the partners would be placed in rural/reservation settings, while during the other, they would find themselves in multicultural urban settings. Through these dual assignments, we hoped to address the first prong, preparing Euro-American teachers for diversity, by affecting attitude change through having them, as Banks (1991) suggests,

FIGURE 1



"consider alternative attitudes and values, and to personally confront some of their latent values and attitudes toward other races" (p. 141). We also sought to address the second prong of teacher preparation for diversity; we decided to recruit Indian students for the program.

We determined that we would pair a dominant society student with an American Indian student. Figure 1 above shows the configuration of students, and the assignments for each pair.

In this way, each might assist the other in dealing with the novel situations that they would encounter as they moved between two unfamiliar worlds.

METHODOLOGY

Participants

Mentor Teachers

In early fall, 1993, we presented the model to the Southern Pueblos Agency board, seeking input and support from these representatives of Pueblo Indian communities. Subsequently, we visited the five Pueblo reservation schools served by the Agency. After our presentation to potential mentor teachers at Isleta Pueblo, we were invited to address teachers at Laguna Pueblo by the principal of the elementary school. Laguna, separated several years ago from the larger Southern Prneblos Agency, now exists as its own agency.

Interested teachers were requested to submit a brief personal statement on teaching, as well as to submit a letter of support from their principals. Upon receipt of the materials, in consultation with Valentino Cordova, head of the Southern PineDos Agency Education office, we accepted six agency teachers. Two American Indian women from Acoma Pueblo, one Euro-American woman from San Felipe Pueblo, and three Euro-Americans, two women, one man, from Laguna Pueblo's schools. Both American Indian women had been graduates of the University efforts of the 1970's.

From the Albuquerque Public Schools we recruited five teachers. Two Hispanic women worked in bilingual classrooms in urban Albuquerque. The three EuroAmerican women worked with varied population, ranging from children living in a trailer park to those residing in an upper-middle class suburban development.

Student Teachers

In late fall, 1993, we began recruitment of the target population, six Pueblo students who had begun, but failed to complete, their work under the University's on-site All Indian Pueblo Council Teacher Preparation Program. Given the results of the 1993 survey, we knew that finances represented a great hurdle to the completion of the students' programs, and so determined to offer the dual site placements during a single semester.

In our first efforts, we again visited the six agency schools from which we had recruited the mentor teachers. We explained to the teaching assistants that they would need to leave their jobs in order to student teach full-time during the spring; however, we would be able to pay for their tuition and offer a small stipend. We spoke with more than 30 assistants; only four made the decision to leave their positions.

Oinnng a Reduction in Forces (RIF) the year prior, a number of assistants had lost their positions; perhaps this made many reluctant to leave. An assistant's pay is, at best, modest; for those living on reservations, it represents a reliable, consistent income for families.

We then pursued the teaching assistants who had lost their positions during the RIF. of the seven with whom we met, two made the decision to leave their employment at a daycare center to join the program, giving us our six students. In early January, two of the recruited six informed us of their decision not to resume their studies. We did, however, gain one additional Native student. Considerably younger and more "Worldly" than the other women, the fifth student was Navajo/Cheyenne/Sioux.

We understood Wilson's (1991) concept of a nurturing environment. For our Indian students, we carefully examined their programs of study, we assisted them with the registration, which must have seemed rather daunting with its numerous lines and forms, and we accompanied them to the financial aid officer. We let them know that we were available, even lending them money for books or gas.

To recruit their counterparts, we explained the program and its goals to students in the Block program. Of the thirty-six students, seven applied. We matched five of them with an Indian partner.

Procedures

Mentor Teachers

Teachers began meeting on a weekly basis under the auspices of a graduate level course on Teaching and Learning. After some initial readings on preparation of teachers for culturally diverse children, the teachers began planning the experiences they believed would best prepare the students to become strong teachers.

In February, all mentor teachers were supplied with modem-equipped computers. All public messages sent on the mentor teachers' bulletin board were saved for analysis.

All mentor teachers were interviewed at the conclusion of the semester.

Student Teachers

Student teachers were required to write weekly reflections, as Julie's words demonstrate. In addition, seven of the 10 participated in a group discussion at the end of the semester.

Data Analysis

All data have been analyzed qualitatively to locate emerging themes. Written records, interviews, and group discussions are seen to triangulate the findings.

Additionally, e-mail messages of the mentor teachers have been quantitatively examined.

RESULTS

Responses to the Program: Mentor Teachers

Electronic Mail

In the period ranging from February 2, 1994 through May 23, 1994, mentor teachers sent 194 messages. Fifty-eight were sent in February, seventy-one were sent in March, the month when student teachers arrived in their classrooms, twenty- four were sent in April, while forty-one were sent in May. Most messages sent in May dealt with arrangements for the next school year.

Each e-mail message was analyzed for its content. In certain cases, messages were coded into two categories. By far, the most messages (68) were sent in the "Refrigerator Notes" category, which encompassed reminders of various sorts, such as the location for a meeting, or the type of materials teachers were expected to bring to the upcoming meetings. Typical is the following message.

> Hi, this is Laura letting you know that Cecilia Montoya is joining us on the TEAMS project.

The next largest category of messages (41) concerned how the electronic mail system was functioning. Typical is the following message.

> Don't worry. If you mess up, just turn the machine off. And everything will be okay.

The third greatest number of messages (22) were found in the category "Issues for Decision and Discussion." The following message from tinda is typical.

> Carol and I feel that it is extremely important for the student teachers to have some time and experiences with planning lessons, following through with the presentation of those lessons, and reflecting upon the lessons and how they went, what could or should be different next time and how they met or did not meet specific objectives. We feel that it is also important to spend time reflecting each day on what has taken place, what we have learned about the students and our interactions.

In all 19 categories were created to account for the content of the mentor teacher messages. Increased mentor teacher growth in multicultural sensitivity is visible in Catherine's message of May 8.

> I went to the mini math workshop yesterday at the resource center and attended a session that was somewhat thought provoking. The title was something about patterns and Native American students and had little to do with math. There was a discussion on the book **Ten Little Rabbits** and the word Indian. Sometimes I feel so ignorant about what is appropriate and what isn't. Sometimes I don't see the difference between stereotyping and honoring someone's culture. I think lots of teachers avoid multicultural lessons because they are afraid they might offend. Does any of that make sense?

Individual Interviews

In their individual interviews, Euro-American mentor teachers from APS reflected upon

their personal growth in cross-cultural understanding. tinda spoke first of her EuroAmerica student, then of herself.

> I think it made Nora look at things differently, it certainly made me look at things differently. kings I would never have expected. Maybe because I'm from the supposedly dominant culture, you just accept things at this value and assume that other people accept them that way too, without giving it too much thought at some times.

Mentor teachers agreed the program had provided an exceptionally strong experience for the students. Martha, a Ernro-American with many years teaching in Pueblo schools commented on the importance of the dual-site assignment.

> Working with Native American children in Albuquerque is a heck of a lot different than working out on the reservation. Student teachers who were coming out to our school to be interviewed said, "Oh, but we get so many diverse cultures in APS." But there's a big difference between APS children or Albuquerque children and children out in the rural areas, whether or not you teach on a reservation, whether you're just teaching in a small town school, or a totally Hispanic school. There's a big difference. And they need to see those differences.

Mentor teachers had many suggestions for improving the program, but felt that it had succeeded in stressing cross-cultural issues.

Responses to the Program: Student Teachers' Group Discussion

During their group discussion, the students were asked to consider their total preparation at the University, the program itself, and then the impact that the program had on their cross-cultural knowledge. In Table 1 below, the students' responses to similarities and differences to being in the two cultural settings are displayed.

The students demonstrate an awareness of many concerns in Indian education. Critical is the question of how to involve parents in their children's education. Karen, the youngest of the Indian women, repeatedly stressed during this topic's discussion that there was history to be considered, which included not only parents', but also grandparents', experiences with 'she White Man's schools."

TABLE 1.

Contrasting Rural and Urban Schools As Described by Student Teachers

Similarities	Urban	Rural/Reservation
'Kids are kids' • they chat • they get off task	multicultural class • some children monolingual Spanish	monocultural class • more self-esteem • more secure • more connected to community: family relationships
"They want the same things' • eager to learn • eager to please • sensitive feelings • want security •	• culture not acknowledged	
	some parental disengagement • monolingual Spanish	little parental involvement • less presence • appear at holidays • appear at bake sales • do not support teacher or homework • checked kids out of school more often

warned not to touch children	children were warm • wanted to by physically close
	children were respectful
some children monolingual in Spanish	children spoke English
assessment: portfolios & standardized testing	heavy emphasis on standardized testing Principal and Board members highly present at Laguna, but not Acoma

Also noteworthy is the students' focus on the issue of physical proximity. Within the metropolitan setting, there are taboos; there is a fear of suit from parents. Within the Pueblo, children, secure in what Julie calls their monoculturalism, welcome the warmth which teachers share.

Finally, the students' comments on the avoidance of culture within the urban multicultural classroom seem very quite accurate. As the mentor teacher Catherine has expressed, there is fear in being offensive. Avoidance seems the safest route.

The students were also asked to address what they had learned from their partners. These results can be seen in Table 2 below.

The partners had grown genuinely fond of each other. Julie reported an "instant bonding" between herself and Karen. Kristen and her Indian partner Laurencita had become exceptionally close. Kristen had gone to Laurencita's pueblo on a Feast Day, fulfilling the function of hostess in Laurencita's home so that Laurencita herself might be free to take part in the traditional Corn Dance.

Just as mentor teacher Linda had indicated in her interview, students felt that working with a person of another culture had greatly impacted their understandings of the workings of that culture. That this learning went both ways is clear in Table 2.

TABLE 2

Learning from Partners: A cross-cultural experience

Non-Indian Students	Indian Students
• Gained information about another culture - through talk - through "osmosis," just being together - through participation in traditional events, such as Pow Wow and Feast day	• Gained a friend • Through observing partner, - learned how to assemble resources - learned how to be more organized
• Developed personal relations - through meeting other's families - through spending time in each other's homes	• Helping hand for one another - saw partner as support for finishing student teaching

Indian students spoke of how they observed their partners' approaches to various tasks, and learned from them,

Finally, the students were asked to cite some surprising moments when they had learned about culture. These comments appear in Table 3 below.

TABLE 3

Responses and Surprises in Working in Two Cultural Settings

APS: Indian Students	BIA: Non-Indian	BIA: Indian Students
• Scared of rejection by parents and staff	• checked with partner to see if materials were appropriate	• surprised that children would be allowed to bury themselves in sand
• concerned about speaking properly	• felt isolation as only as only non-Indian	• surprised at children's lack of knowledge of the Rio Grande Pueblos
• difficulties convincing children about	• felt fear of rejection by staff of school	
• surprised that children didn't have to stand for Pledge to flag	• surprised at children's racist remarks	
• surprised that children would correct mispronunciations	• strongly aware of Native language & children's strong attachment to their culture	

Perhaps most critical here is that both Indian and non-Indian students, as Julie's opening remarks demonstrate, feared rejection in the culture they did not know.

DISCUSSION

From the responses of the student teachers, from the responses of the mentor teachers, it seems clear that the program is achieving its goal. This past week, we were informed that Linda, after so many years of being a teaching assistant, has been hired as a teacher at Acoma's Sky City Elementary. Happily, so, too, has been her new friend Kristen. It gave us great pleasure to hear the principal comment "You are turning out some excellent teachers."

While there have been other "immersion" teacher education programs, we believe ours to be the first in which students are paired with a culturally-different other. If, as Banks (1991) suggests that it is crucial for perspective teachers "to reflect upon the consequences of their attitudes and values" (p. 141), then it would appear that the presence of a knowledgeable adult companion has immeasurable value. We are unsure whether the students or the mentor teachers learned more about their personal attitudes and stances from the presence of the partnerships in the two teaching situations.

What remains a source of great difficulty for us is the recruitment and retention of Indian students. Money is a very definite consideration. We have been lucky to have had support from a US West grant, and from the University itself. Those monies are not permanent; we must now seek funding elsewhere. We also know that those funds we had available are too meager for some. Joan, one of Indian students, has left the program after multiple arguments with her spouse about the income she no longer contributes and about how she is attempting to rise above him. We know, too, that we must continue to supply that nurturing environment, not only through the hoops and hurdles of University bureaucracy, but also in terms of emotional support, for those Indian students with the courage to step into the "White Man's World."

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HIGHER EDUCATION AS A PARTNER IN RURAL DEVELOPMENT: AN EMPIRICAL ANALYSIS OF PUBLIC SERVICE ACTIVITIES OF THE COLLEGES AND UNIVERSITIES OF NORTHERN NEW YORK*

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ABSTRACT

Institutions of higher education in the United States regard public service integral to their mission. The 20 colleges and universities in this study are no exception to this commitment. The study confirms that each institution is actively involved in both community and regional development through making its knowledge-based resources available to area organizations engaged in social and economic development. The study shows that the services provided depend on the leadership, degree of commitment to public service, location, size, academic program strength, and expertise of its faculty and staff. Services provided can be categorized as: small business assistance, technical assistance, export assistance, total quality management, technology transfer, continuing education and training programs, economic research, environmental and forestry management, public education, assistance to cultural organizations, and conference and workshop facilities. Institutions share these services with area organizations in the public/private sector to help improve the quality of life for people in this rural region. The study concludes that a high degree of college-community interaction results in the institutions being viewed as assets for economic development with resultant recognition, status and prestige in their communities.

This paper presents an examination of the public service activities of the colleges and universities in Northern New York (NNY) and of the impact these services have on regional rural development. It is based on the results of a survey conducted in 1992. Section I provides background on the partnership between higher education and the economy. Section II gives profiles of the NNY region and its colleges and universities. Section III discusses the objectives and findings of the survey. Section IV summarizes the *direct* and *indirect* economic impact of colleges and universities on the surrounding communities. Section V provides concluding observations.

I. Historical Background

Institutions of higher education are often called upon to become catalysts for economic development by sharing their knowledge, expertise and other resources. The demand for higher education to become involved in such development has, in fact, increased considerably over the recent past because of the many challenges confronting the United States. The United States economy is being subjected to an increasing degree of global competition, rapid technological changes and automation, revolutionary advances in methods of communication and information processing, and increasing pressure for environmental protection.

Today, higher education is being asked to do for a fast changing technological and information-based economy that the Land Grant Act of 1862 did for the agriculture and natural resources -based economy. The 1862 Act created the land-grant university system which "provided the basis for partnership between higher education, business, and government in the fields of agriculture and the mechanical arts."[1] That partnership transformed agriculture into a scientifically

and technologically advanced sector of the economy as revolutionary changes in methods of production were developed. Laws enacted later strengthened the bond between higher education and the economy even further. For example, the Hatch Act of 1887 provided funds for the establishment of experiment stations at the land-grant colleges to assess agricultural problems actually encountered; the Smith-Lever Act, of 1914 subsidized the establishment of the Cooperative Extension Services; and the Smith-Hughes Act, of 1917, provided funding for vocational training.

The 1862 Land Grant Act was pioneering legislation. Educational institutions could no longer be seen only as "ivory towers" unconcerned with the social and economic issues confronting society. They could now be viewed as important contributors to improving the well-being of society through increasing the availability of their knowledge and expertise. Public service, thus, became an important mission of higher education. "The land grant model," according to Patricia Crosson, "provides a powerful and lasting model for public service, and a variety of relatively recent attempts have been made to replicate it in other areas like education, public health, and urban services."[2]

For example, a 1980 survey conducted by Kurt Smith concerning the public service activities of the institutions belonging to the American Association of State Colleges and Universities (AASCU), found that 92% (234 out of 255) of the respondents indicated they "recognized public service as an area of institutional responsibility in their mission statement. A majority (58%) of AASCU institutions described public service as one of their integral functions, together with teaching and research."[3] Similarly, a 1985 survey conducted by the AASCU Task Force on Economic Development, found that 98 percent (294 out of 300) of AASCU institutions "indicated that they perceived new demands to play a more active role in economic development...[and]" "97 percent had plans to increase their efforts in economic development."[4]

Responding to these public expectations, the State University of New York (SUNY) has made economic development "an integral part of SUNY's teaching, research and service missions."5 SUNY has proclaimed that it will share, "its expertise with the business, agricultural, governmental, labor and nonprofit sectors through a program of *public service* for the purpose of enhancing the well-being of the people of the State of New York and in protecting our environment and marine resources."6

The colleges and universities located in the 14 counties of NNY are no exception to this national and state trend as the following study well documents.

II. Profiles of the NNY Region and Its Educational Institutions

The study covers 14 counties of Northern New York generally known as the North Country. This area covers 18,014 square miles which constitutes about 38% of the land mass of New York State. NNY is the most rural region in the state, sparsely populated, and geographically isolated. Population density, in 1990, was about 68 people per square mile versus the state average of 381. NNY's total population of about 1.2 million in 1990 was 6.6% of the state's total. The region generally suffers from higher unemployment and lower per capita income than the rest of the state. The average per capita in 1989 was $11,739 compared to the state average of $16,501. Because of its low level of economic growth and lack of economic opportunities, the region experiences many problems typical of a rural area, including: higher rates of poverty; lower levels of educational attainment; inadequate transportation networks; limited access to health care and social services; out migration of young people; and, a low tax base.

Additionally, the area has experienced significant political fragmentation that has resulted in the relevant small size of local governments which has led to higher costs in delivery of public services because of diseconomies of scale. On the positive side, the region has vast natural resources in agriculture, mining, forests, lakes and waterfalls, and clean air and water. It also has many ski facilities and excellent tourism opportunities. The area's proximity to the rich Canadian market is considered an important asset. The region, therefore, does have potential for high economic growth and it is primarily because of this potential that many developers term NNY as the "under-developed empire of the Empire State." Promoting development and creating jobs are the major priorities of the region. Table 1 gives selected economic indicators of the region.

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* This paper is based on information from Chugh, Ram L. *Higher Education and Regional Development. A Compendium of Public Service Activities by Colleges and Universities in Northern New York*, The Rural Services Institute, Potsdam College of the State University of New York, July 1992

Table 1: SELECTED ECONOMIC INDICATORS OF THE NNY REGION

County	Land Area Sq Mi	1990 population	1990 population density	1989 per capita income	1990 unemployment rate
Clinton	1039	85,969	83	$11,444	5.7%
Essex	1797	37,152	21	$11,354	7.6%
Franklin	1632	46,540	8	$ 9,771	7.2%
Fulton	496	54,191	109	$11,330	8.1%
Hamilton	1721	5,279	3	$11,682	8.1%
Herkimer	1412	65,797	47	$10,543	5.6%
Jefferson	1272	110,943	87	$11,160	7.8%
Lewis	1276	26,796	21	$10,455	7.8%
Oneida	1213	250,836	207	$12,227	4.3%
Oswego	953	121,771	128	$11,792	6.5%
St Lawrence	2686	111,974	42	$10,346	7.4%
Saratoga	812	181,276	223	$15,644	3.8%
Warren	870	59,209	68	$14,387	6.2%
Washington	835	59,330	71	$12,221	5.3%
Total/Average	17,202	1,035,787	55	$11,439	6.5%
New York State	47224	17,990,455	381	$16,501	5.2%

Source: *New York State Office of Rural Affairs*

Despite its many economic problems, the region, is blessed with a wide array of colleges and universities as shown in Table 2 and in the map. Of the region's twenty-one colleges and universities, seven of which are private and fourteen public. Three of the private institutions are two-year colleges, three four-year colleges, and one graduate institution. The public institutions include seven two-year community colleges, one two-year college of technology, three four-year colleges, one upper division and graduate institute of technology, one specialized upper division and graduate college of environmental science and forestry, and, finally, Empire State College which offers instruction through individual learning arrangements. Among the private colleges, two are religious institutions. The smallest college is Wadhams Hall (a seminary institution) with enrollment of nearly 40 students and the largest is Mohawk Valley Community College with enrollment of over 7,500 students. The region takes pride in having several institutions which are among the oldest in the country. There are four institutions which are more than 100 years old. For example, Potsdam College, tracing its origin to 1816, celebrated its 178th anniversary in 1994. St. Lawrence University, established in 1856, has the distinction of being the oldest continuously coeducational institution of higher learning in New York State.

III. Objectives of the Study and Analysis of Survey Results:

Because of the wide diversity among the institutions, the nature and magnitude of public service activities provided can be expected to vary from one institution to the other. In an effort to assess the public service activities of area colleges and universities, a comprehensive survey questionnaire entitled, "Questionnaire on Public Service Activities of the Colleges and Universities Located in

Table 2 SELECTED INFORMATION ON COLLEGES AND UNIVERSITIES LOCATED IN NORTHERN NEW YORK

College / University	Year Started	County	Budget 90-91*	Employee FTE 90-91	Student FTE 90-91	**Econ. Impact*
Adirondack Community College	1961	Saratoga	$10.5	259.0	2,351.0	$ 27.9
Canton College of Technology	1906	St Lawrence	$11.4	273.0	1,909.0	$ 35.7
Clarkson University†	1896	St Lawrence	$62.0	666.0	3,500.0	$124.0
Clinton Community College	1969	Clinton	$ 7.4	182.1	1,436.2	$ 53.5
Empire State College	1971	Saratoga	$18.7	347.6	4,185.0	--------
Fulton-Montgomery Community College	1964	Fulton	$ 8.8	168.1	1,570.8	$ 14.8
Herkimer County Community College	1967	Herkimer	$ 9.9	294.6	2,115.6	$ 28.0
Jefferson Community College	1961	Jefferson	$ 7.8	220.0	1,794.9	$ 35.9
Mater Dei College†	1960	St Lawrence	$ 5.0	125.0	530.0	--------
Mohawk Valley Community College	1946	Oneida	$23.2	668.0	5,084.3	$ 60.1
North Country Community College	1967	Essex	$ 6.8	189.3	1,112.5	$ 9.2
Paul Smith's College †	1937	Franklin	$12.5	250.0	786.0	--------
SUNY Potsdam	1816	St Lawrence	$24.1	527.4	4,104.0	$ 70.9
St Lawrence University†	1856	St Lawrence	$52.2	650.0	2,073.0	$ 31.8
SUC Environmental Science and Forestry	1911	St Lawrence	$23.3	403.2	1,150.0	--------
SUNY Institute of Technology	1973	Oneida	$13.0	271.1	1,575.0	--------
SUNY Oswego	1861	Oswego	$34.9	801.6	6,753.0	$ 72.9
SUNY Plattsburg	1889	Clinton	$28.3	641.5	5,302.0	$122.0
Utica College of Syracuse University†	1946	Oneida	$23.2	286.0	1,933.0	$ 57.5
Wadhams Hall (Seminary College) †	1924	St Lawrence	$ 7.5	30.0	35.0	--------
		TOTAL	$383.5	7,253.5	49,300.3	$744.2

* all dollar figures are in millions **for different years, some figures have been estimated † private institution

New York State
0 20 40 60 80 100
Miles

Colleges and Universities in Northern New York

1. Adirondack Community College
2. Canton College of Technology
3. Clarkson University
4. Clinton Commmunity College
5. Empire State College
6. Fulton-Montgomery Community College
7. Herkimer Community College
8. Jefferson Community College
9. Mater Dei College
10. MohawkValley Community College
11. North Country Community College
12. Paul Smith's College
13. St. Lawrence University
14. SUNY College of Environmental Science and Forestry
15. SUNY Inst. of Tech. at Utica/Rome
16. SUNY Oswego
17. SUNY Plattsburgh
18. SUNY Potsdam
19. Utica College of Syracuse University
20. Wadham Hall Seminary College

the NNY Region," was developed and was conducted in early 1992. The survey instrument contained thirty-two questions on various aspects of public service. It was designed to determine the following: (1) the importance of public service in each institution's mission statement and the degree of its actual involvement in such activities; (2) the range of each institution's public service programs, the geographic focus of the programs and the type of organizations using those services; (3) the organizational structures created to deliver public service programs and the level of administrative and other support provided; (4) the areas of expertise of faculty and staff relating to these public service programs; (5) the names and addresses of people who could be contacted by external groups needing each institution's services; (6) the nature of each institution's interaction with community leaders and external organizations; (7) and finally, the magnitude of the institution's economic impact on the local economy. It was expected that the survey findings, when published, could be utilized by the rural development organizations and others as a directory or resource manual for seeking appropriate technical assistance from the colleges and universities.

Since the term public service lacks a precise definition and is, thus, subject to many interpretations, it was considered necessary to give a clear definition of the term to get consistent responses to the survey questions. For the purposes of the study, public service was defined as "those activities designed to meet the needs of external public or private organizations and/or individuals engaged in rural development." Examples were: community and economic development assistance; small business assistance; international trade and investment assistance; marketing and feasibility studies; computer assistance; grant writing assistance; and services designed to meet community needs involving local government, environment, tourism, agriculture, social services, health services, education, art, music and culture. Other examples were: organizing and hosting conferences and seminars on local and regional issues; providing training workshops; offering credit and/or non-credit public service-related courses; participating in outside organizations and associations; conducting research on local and/or regional issues; developing cooperative programs with area high schools; and, involving individuals from the local community in various campus activities, e.g., having them on advisory committees and task forces.

Because of the broad scope of public service, the survey questionnaire was lengthy, requiring considerable information from the institutions regarding their service programs. After review by several individuals and a pilot testing, it was sent directly to campus presidents. The presidents were asked to have it completed by individuals knowledgeable about the public service programs at the institution. The institutions were also encouraged to send supporting documents including mission statements, college catalogs, brochures describing special institutes and centers, directories of public service activities, annual reports, and brochures on conferences, workshops and training programs as well as economic impact studies of their institutions.

Of the twenty-one colleges and universities asked to participate, twenty completed the questionnaire. The survey results are presented below.

A. Significance of Public Service Activities: Using a scale of 5 to 1 (with 5 being the most important and 1 being the least important) the institutions were asked to indicate the importance of public service to their educational mission, the level of their actual involvement in such activities, and, finally, the degree of public appreciation of their public service activities. Results are given in Table 3.

Table 3: SIGNIFICANCE OF PUBLIC SERVICE ACTIVITIES

	5	4	3	2	1
Importance	11	2	5	1	0
Actual level of involvement	9	5	5	0	0
Degree of public appreciation	6	9	5	0	0

The survey results confirm the general perception that NNY colleges and universities regard public service as very important to their institutional mission. In fact, 18 of them give it a rating of 3 or above with 11 giving it the highest rating of 5. One institution rated its importance as 2 and one did not respond at all. Similarly, the actual level of involvement is also reported very high among all the institutions. Furthermore, the survey results indicate a very high degree of public appreciation of the institutions' public services.

B. Range of Services Offered and Areas of Institutional Strengths: Most institutions provide a wide range of services to meet diverse community needs. In fact, one can almost always find the needed expertise on any subject at one or another institution in the region. These services can be grouped in the following broad categories. (a) Local and regional development and planning. (b) Small business assistance and entrepreneurship development programs. (c) Economic research and analysis of rural problems. (d)International trade assistance. (d)Health care and social services. (e) Human resource development and training programs (f) Public education. (g) Local government management and technical assistance. (h) Conference and workshop facilities.

Through the provision of these services, the NNY educational institutions play an important role in the development of the region. Some of the institutions listed the services it had provided to small businesses, potential entrepreneurs, local government, feasibility and marketing studies conducted for various organizations in the community. Several colleges and universities listed the specific skill building training they had provided to employees of both private and public sectors. Almost every institution had a group of several faculty and staff members actively involved in various aspect of local and regional development. These services were often made available either at no or at low cost.

In the survey, each institution was asked to identify the areas of its strength in public service which could be utilized by outside groups. SUNY Potsdam, for example, listed its strength in services as: Music and Performing arts, Fine Arts, Public Education, Computer Assistance, Economics and Labor Relations Research, Seismic Network, and Rural Services Institute. Responses for all institutions are given in Appendix A.

C. Organizational Structure for the Delivery of Public Service: Administrative structures for public service delivery vary among the institutions. These activities are generally carried out by several departments at each campus. Survey responses indicate a great degree of decentralization in the development and delivery of public service programs. In one sense, this may be healthy as public service needs are often unpredictable and vary from year to year. At most campuses, offices of continuing education, special institutes and centers are responsible for public service activities and enjoy considerable freedom in the delivery of these services to the community. For administrative purposes, however, these programs are often linked to an appropriate academic or administrative structure within the college or university. Accordingly, campus presidents, vice presidents, and academic deans directly and/or indirectly oversee their institution's public service activities. At most campuses, the dean/director of continuing education serves as the primary contact person with outside organizations.

D. Level of Financial and Staff Support: The campuses were asked to indicate the approximate value of human and financial resources devoted annually to supporting public service. Several institutions were unable to give a definite response to this question because of the difficulty in estimating the resources devoted to such services. Some mentioned that most individuals involved in public service also had other institutional responsibilities. For example, the Director of Continuing Education is often responsible not only for public service programs but also for programs to meet institutional needs as well (e.g., summer sessions). Even when programs were externally funded, the institutions provided some indirect support that was not always easy to quantify. Some campuses, however, did provide an estimate of their support for public services. For example, Clinton Community College estimates that it spends approximately $500,000 annually on public service activities; Mater Dei reportedly spends between $75,000 and $100,000; and the Institute of Technology at Utica/Rome devotes an estimated $300,000. In response to the question, ("Has your institution decreased, increased, or held constant its support for public service activities over the past few years?"), fifteen institutions noted they had increased their support, four indicated they maintained a constant level of support, and one indicated that it had decreased the level of its support due to budget cutbacks.

E. Geographic Focus of Public Service Programs. Using a scale of 5 to 1 (with 5 as the most important and 1 as the least), the campuses were asked to rate the geographic focus of their public service programs. Table 4 summarizes the survey responses (not all twenty campuses responded to all questions).

Table 4: Geographic Focus of Public Service Programs

	5	4	3	2	1	Cumulative Score*
Local	16	4	0	0	0	96
County	11	5	2	0	0	81
NNY	5	5	8	2	0	73
NYS	3	3	4	6	4	55
International	3	1	3	3	9	43

* Numerical ratings given by the institutions to each area were added together to develop cumulative scores. For example, the cumulative score for NYS was calculated by adding (3 x 5) + (3 x 4) + (4 x 3) + (6 x 2) + (4 x 1) = 55.

The results clearly indicate that local communities are the primary focus for almost all the institutions, followed by the county in which they are located. It is generally recognized that economic development activities undertaken by most rural educational institutions are geared toward meeting local or regional needs. The survey responses confirm this perception. Larger and specialized institutions, as well as those located in bigger cities, tend to have a much broader geographic focus. For example, SUNY Environmental Science and Forestry College (ESF), as a specialized institution, provides its services to the entire state and, in some cases, nationally and internationally.

Based on the cumulative scores, local communities as a geographic focus received the highest score of 96 out of a maximum of 100, followed by the county of the institution's location with a score of 81. International focus scores a low of 43. However, the lowest score for the "international focus" needs some explanation. The international area is not the major focus for most NNY institutions. The institutions' individual responses in Table 5 indicate that only three regard the international area as their most important focus while sixteen institutions give "local" communities the highest rating. It should, however, be kept in mind that because "international area" implies working with international corporations and businesses located in foreign countries, those institutions strong in international business programs would more likely regard this as their area of major emphasis. Within NNY, Clarkson University, SUNY Plattsburgh and ESF seem to have that orientation. A note of caution: some institutions giving a low rating to the international area in fact have a strong "export assistance" program designed primarily to help local businesses interested in exploring foreign markets. Several community colleges, especially MVCC, have strong export assistance programs.

F. Organizations Making Use of Public Service Activities. Using a scale of 5 to 1, the institutions were asked to rank the organizations and agencies which most often use their public service programs. Table 5 summarizes their responses (not all twenty responded to all questions). The table also includes a cumulative score for each organization.

Table 5: Organizations Using Public Services

	5	4	3	2	1	Cumulative Score
Local governments	11	0	5	3	1	77
Businesses	8	6	3	2	1	78
Econ. development	6	6	5	0	2	71
Social services	8	5	6	1	0	80
Secondary education	8	6	3	3	0	79
Art, music, cultural	1	7	4	6	2	59
Environmental	3	5	8	2	2	65
Tourism	3	5	6	5	1	64
Health services	5	7	7	0	1	75
Agri, forestry, dairy	2	2	5	6	5	50
State government	6	2	5	5	2	65

Based on the cumulative scores, the organizations and agencies can be divided into three groups. Group I consists of organizations with a cumulative score of 70 and above which make the most use of public service programs. These include local governments, businesses, economic development agencies, social services departments, secondary education, and health services organizations. Group II consists of organizations with scores between 60 and 70 which appear to make slightly less use of public service programs. These organizations are involved in environmental, tourism and state governmental concerns. Group III consists of organizations with cumulative scores of less than 60. They make even less use of public service programs and include art, music, cultural, agriculture, forestry and dairy organizations.

It should be noted, however, that the above groupings are based on cumulative scores which should be interpreted with care. It is quite possible that an organization included in Group III may, in fact, make the most use of a particular institution's public service programs. For example, agriculture, forestry, and dairy organizations receiving the lowest cumulative score of 50 may actually be the most important user of the services offered by Paul Smith's College (a forestry institution) and/or Environmental Science and Forestry. Similarly, an organization included in Group I may make the least use of an institution's programs (e.g., Wadhams Hall - a seminary institution). It can be stated, nevertheless, that no single category of organization emerges as the dominant user of public service programs. This is, of course, not unexpected given the fact that most of the institutions within the NNY region offer a wide variety of services and tend to meet the needs of more than one type of organization.

G. Reasons for Public Service Activities. Why do institutions in higher education participate in public service? What factors motivate them to do so? Again, using a scale of 5 to 1, institutions were asked to rank six factors. Table 6 summarizes the responses and includes cumulative scores for each factor.

TABLE 6: Reasons for Public Service Activities

	5	4	3	2	1	Cumulative Score
Enhances reputation	11	4	4	1	0	85
Generates support	13	1	5	1	0	86
Helps in raising external funds	1	7	7	4	1	63
Strengthens academic mission	9	7	4	0	0	85
Professional/moral obligations	8	8	3	1	0	83
Pressure from local community	1	3	6	3	7	48

Institutional rating of each factor and cumulative scores clearly indicate that no single factor emerges as the dominant reason for institutional involvement in public service. In fact, it appears that the four factors (enhances public reputation, generates public support, strengthens academic mission, and professional/moral obligations) which received almost identical cumulative scores underlie an institution's involvement in public service. Raising external funds, while important, clearly does not appear to be the primary reason for undertaking public service programs.

It is worth pointing out that only one institution rated "pressure from the local community" as the most important reason for its involvement. Overall rating of this factor, however, is the lowest. While institutions of higher education engage in public service for a variety of reasons, the least influential among those according to the survey is pressure from their communities.

H. Factors Inhibiting Public Service Activities: Institutions were asked to identify the factors which inhibit their involvement in public service by rank ordering six factors on a scale of 5 to 1. The results are presented in Table 7 with cumulative scores for each factor.

Table 7: Factors inhibiting Public Service Activities

	5	4	3	2	1	Cumulative Score
Conflict with mission	1	0	2	1	16	29
Lack of resources	9	4	6	0	1	80
Lack of faculty/staff interest	0	3	6	7	4	48
Lack of leadership support	0	1	2	2	15	29
Lack of public support/appreciation	0	0	2	4	14	28
Bureaucratic obstacles/lack of flexibility	4	2	3	3	8	51

Lack of resources is clearly identified by most institutions as the major inhibiting factor. Only one institution listed this factor as "least" inhibiting while nine rated it as "most" inhibiting. This response is not surprising. Most educational institutions have recently experienced severe budgetary problems and, accordingly, had difficulty even adequately funding their primary missions of teaching and research. In times of budgetary crises, public service programs often become the target for cutbacks since they are not considered at the core of the institution's mission.

It is, however, interesting to note that despite restrictive budgetary situations being regarded as a major barrier to expanding or maintaining public service programs, yet in response to another question (see section D), fifteen institutions indicated that they had increased their support for public service efforts over the past few years, and only one indicated it had decreased its level of support. This apparent inconsistency can perhaps be explained by the following. Institutions strongly committed to public service and desirous of expanding these activities but finding it difficult to do so because of budgetary cutbacks can, nevertheless, increase their public service activities by undertaking those programs which do not impose much burden on the institution's budget, e.g., student internships and faculty consultation at no cost. Some institutions also sought and received outside funds (grants and private contributions) to continue their public service activities. In some cases, institutions have started charging user fees for public service programs which had previously been offered free of charge.

The other two major inhibiting factors identified are bureaucratic obstacles/lack of flexibility and lack of faculty/staff interest. While the cumulative scores for these two factors are very similar and may appear to be almost equally inhibiting, closer analysis of individual responses indicates that bureaucratic obstacles/lack of flexibility is considered a much more inhibiting factor than lack of faculty/staff interest. For example, four institutions rated bureaucratic obstacles/lack of flexibility as the "most" inhibiting factor while no institution indicated lack of faculty/staff interest as "most" inhibiting. This contrast in ratings is quite interesting. Speculatively, bureaucratic obstacles/lack of flexibility seems to be a serious barrier especially for public institutions because of their highly regulatory environment. The vast amount of paperwork required to get new initiatives approved is often time consuming and frustrating. Private institutions, while not totally free from these regulations, do enjoy greater flexibility in planning and executing their public service programs.

Lack of faculty and staff interest in public service activities might be attributed to lack of clarity concerning the reward structure of an institution. It has been observed that most faculty and staff generally believe that public service activities do not count much in personnel policy decisions (promotion, tenure, reappointment, etc.). Several institutions, in their responses, mentioned that they were in the process of clarifying the role of public service activities in their reward structure. Perceptions of public service activities playing a lesser role in personnel decisions relative to teaching and research, however, are hard to overcome.

I. Faculty and Staff Expertise: Each institution was asked to identify ten to twelve faculty and staff members who were active in rural development and to list their areas of expertise. This information was requested so that a directory of resource persons could be prepared for use by development organizations. Some campuses (e.g., Fulton-Montgomery Community College, SUNY Institute of Technology at Utica/Rome and Herkimer County Community College) already publish such a directory. These directories, updated periodically, are made available to community organizations and to others interested in using the institution's resources. At institutions where such directories do not exist, one can usually obtain the names of faculty and staff along with their relevant expertise by contacting the Office of College Relations or the academic deans.

The NNY educational institutions constitute an extremely rich resource for the region. Because of the diverse nature of these institutions, one can find faculty expertise in almost every conceivable area. Examples include: engineering; business administration; nursing and health; social sciences; computer programming; physics and other natural sciences; humanities; art and music; teacher education; environment and forestry management; hotel and tourism management. The NNY institutions have over 8,000 employees, forty to fifty percent with Ph.D.'s (or other terminal degrees) and another twenty to twenty-five percent with master's degrees. Thus, the region has a pool of highly qualified and talented people whose knowledge can be tapped for the development and enrichment of the region. In fact, to extend this further, almost all other college employees including their spouses have some college education. Survey responses clearly indicate that every institution has a large group of talented faculty and staff interested in assisting their communities, easily accessible and willing to share their knowledge, often at a very nominal charge.

J. College and Community Interaction: The survey responses indicate a high degree of interaction between institutions of higher education and their communities. The "town and gown" relationship is alive and well in the NNY region. College and/or university people are involved in almost every facet of community life. In return, many community people share their expertise by serving in advisory roles to various college and/or university programs.

Individuals employed by NNY colleges and universities serve their community and the surrounding region as members of various organizations. They serve on boards of education, public school committees, literacy organizations, hospital and hospice boards, village and county planning boards, economic development corporations, cultural organizations, civic organizations (Rotary, Kiwanis, Lions, etc.), religious organizations, and various political as well as social service organizations. In many cases, they serve in leadership positions, often as chair or president. Because of their qualifications and experience, they enrich the work of these organizations. Most college and university presidents offer their time and expertise as members of governing boards of profit and/or non-profit organizations in their areas.

Several individuals hold important public offices. For example, Professor James Dawson of SUNY Plattsburgh serves as a Regent of the New York State Department of Education. The chair of the St. Lawrence County Planning Board is a member of Clarkson University's staff, the district governor of the Lions Club comes from SUNY Canton College of Technology, the former chair of the Clinton County Legislature was from SUNY Plattsburgh , the president of the Utica Chamber of Commerce is from Utica College of Syracuse University, the chair of the Montgomery County Task Force on Ethics is from Empire State College, the president of the Greater Oswego Chamber of Commerce is from SUNY Oswego and the president of the United Way of the Mohawk Valley is from Herkimer County Community College.

SUNY Potsdam estimates that nearly forty-five percent of its faculty and staff are involved in community service and devote nearly 100 hours a year in voluntary service. SUNY Institute of Technology estimates that, through voluntary contributions, it makes the equivalent of fifteen full-time employees available to community service projects.

The colleges and universities rely on community people for their advice and expertise. Many institutions have community people who serve in advisory capacities. Individuals from the community can be found on committees and boards including college councils, foundation boards, curriculum committees, public service committees, medical laboratory technology committees, criminal justice advisory committees, holiday brunch committees, professors for a day programs and career planning boards. Survey responses indicate the number of community people involved varies from a low of 80 (Wadhams Hall) to a high of 250 (SUNY Canton College of Technology, Utica College of Syracuse University and SUNY Potsdam). Through this linkage, the college/university can gain rich insights.

K. *Consortia and Inter-Institutional Cooperation:* Respondents were asked to indicate their involvement with other educational institutions, public schools and community organizations in the NNY region in rural development-related projects/studies. Summarized below are selected responses.

- Great Lakes Research Consortium: designed to improve understanding of the largest fresh water system in the world. Involves State University College at Albany, State University College at Brockport, SUNY Buffalo, State University College at Buffalo, Clarkson University, SUNY ESF and State University College at Oswego.
- Fort Drum Consortium: designed to meet the educational needs of soldiers and their families resulting from the expansion of the military base at Fort Drum through extension services offered by SUNY Potsdam, Jefferson Community College, State University College at Oswego, SUNY Institute of Technology at Utica/Rome, Empire State College and SUNY ESF.
- Mohawk Valley Quality Improvement Council (MVQIC): formed to promote awareness of total quality concepts within the business community. Involves Mohawk Valley Community College and three other colleges.
- Northern Advanced Technology Corporation (NATCO): designed to promote economic development in and around Potsdam. Involving SUNY Potsdam, Clarkson University, the Town and Village of Potsdam and St. Lawrence County.
- Council for International Trade, Technology, Education and Communication (CITTEC): created to encourage regional economic development through high technology and international business. Involving SUNY Potsdam, Clarkson University, and economic development organizations in six counties of NNY.
- Tech Prep Program: designed to encourage high school students to consider continuing their education in technical programs at northern New York two-year colleges, such as SUNY Canton College of Technology and other two-year colleges.
- Associated Colleges of the St. Lawrence Valley: created to share resources among the four colleges, publishes a newsletter with activities at SUNY Potsdam, Clarkson University, SUNY Canton College of Technology and St. Lawrence University.
- Liberty Partnership formed to mentor and counsel at-risk high school students to encourage them to finish high school and continue their education. Involves area high schools, SUNY Canton College of Technology, SUNY Potsdam, Clarkson University and St. Lawrence University.
- North Country Consortium: formed to encourage work on joint projects, particularly the economic impact of the Canada-U.S. Free Trade Agreement on the North Country, among SUNY Plattsburgh, SUNY Potsdam, Clarkson University and St. Lawrence University.
- North Country Community College has an articulation program with the Parishville-Hopkinton Central School in wilderness recreation leadership and articulation programs with Franklin-Essex-Hamilton BOCES in office technology and nursing.

Institutions of higher education increasingly recognize the many benefits to be derived from working with other institutions in areas of mutual interests. By pooling and sharing resources through inter-institutional cooperative arrangements, they enhance their overall effectiveness not only in meeting internal needs but external ones as well. Similarly, educational institutions are now reaching out to various external groups to form partnerships and alliances to meet educational and public service needs. Educational institutions and non-educational institutions are recognizing their individual limitations and realizing how, through cooperation, they can expand their access to resources not available to them otherwise. Most of the consortia and cooperative arrangements among the NNY institutions described above were recently developed. This indicates a healthy trend. Faced with hard fiscal realities, institutions of higher education are now taking a more pragmatic approach to the formation of consortia and other cooperative arrangements. In this process, everyone can win. Developing such partnerships, however, requires considerable flexibility. Partners must learn to rise above parochial interests and attitudes, and astute leadership is necessary for these efforts to succeed.

L. *Economic impact of institution:* Colleges and universities, like other businesses, create direct and indirect employment and spending impacts in their local economies. The magnitude of the direct expenditure impact depends upon the purchases made locally by the institution, its employees, students and visitors. In general, for a rural region, the local economy is defined as the county within which a college or university is located. To the extent these college and university entities buy goods and services from outside the county, the magnitude of it's direct expenditure impact is reduced due to what economists call leakages. The indirect expenditure impact is based on the concept of multiplier effect which indicates that every $1 of direct local spending creates a further stream of expenditures within a local economy. The magnitude of indirect spending depends upon the multiplier effect. According to the U.S. Department of Commerce, the multiplier's range is between 1.5 and 3.0. The use of the proper multiplier is important to measure correctly the indirect expenditure impact. The total economic impact of a college is the sum of the direct and indirect expenditures. Estimating the economic impact of an educational institution requires careful analysis of the local expenditures incurred by various entities within the college and use of the proper multiplier.

In the survey, NNY colleges and universities were asked to indicate the magnitude of their economic impact. More than half had conducted such a study. In reporting these campus estimates, no attempt is made to examine the methodology used. It is possible that two campuses located in the same county used different multipliers. Thus, the economic estimates may not be comparable among campuses. For the institutions which did not conduct a study, estimates of their annual operating budget and the number of full-time equivalent (FTE) staff and FTE students enrolled are given. One can get some indication of the size of the economic impact from these data. Table 8 presents the estimates of economic impacts of selected institutions.

Table 8: Economic Impact of Selected Institutions

Institution	Total economic impact (in millions of dollars)
Adirondack Community College	27.9 (1990-91)
Clarkson University	57.0 (1989-90)
Clinton Community College	53.5 (1990-91)
Fulton-Montgomery Community College	14.8 (1990-91)
Herkimer County Community College	28.0 (1990)
Jefferson Community College	35.9 (1990-91)
Mohawk Valley Community College	60.1 (1990-91)
North Country Community College	9.20 (1989)
St. Lawrence University	31.8 (1989-90)
SUNY Canton College of Technology	35.7 (1991-92)
State University College at Oswego	72.9 (1990-91)
State University College at Plattsburgh	122.0 (1991)
State University College at Potsdam	70.9 (1989-90)
Utica College of Syracuse University	57.5 (1991)

V. Conclusion

The survey findings clearly indicate that the institutions of higher education in NNY are a vital part of the economy. In addition to being a major direct economic force, they greatly enrich the social, economic, educational and cultural life of the region. The colleges and universities are a valuable tool for regional economic growth.

It is, however, important for local and regional development authorities to understand and appreciate that the educational institutions operate under their own set of constraints. The challenge for the educational institutions is finding a way to share limited resources with outside groups without jeopardizing their primary mission; to meet the educational needs of their students. The challenge, in turn, for development organizations is to carefully target specific needs and to get the most out of the available resources of the institutions.

Survey results indicate that participation in public service/development activities has been mutually beneficial. On one hand, faculty and students gain "real world" experience and are able to use and expand their knowledge and expertise. Of course, this is contingent upon a carefully designed and structured public service program that is well linked to teaching and scholarly activities on the campus. At the same time, local communities are able to tap into a wealth of knowledge and expertise which would otherwise be unavailable or unaffordable as they strive to meet their needs.

Public service, no doubt, provides a constructive avenue for a productive and mutually rewarding partnership between local communities and colleges and universities to work side by side in promoting local and regional development.

APPENDIX A: AREAS OF INSTITUTIONAL STRENGTH IN PUBLIC SERVICE RELATING TO RURAL DEVELOPMENT

Adirondack Community College

- SCORE (Service Corps of Retired Executives)
- Business Industry Center
- Canadian-American Business Association

Clarkson University

- Export Assistance
- Manufacturing
- Small Business Assistance
- Management Information Systems Program
- Technology Transfer
- Computer Assistance
- Agricultural Ethics
- Mohawk Cultural Program
- U.S.-Canadian Business Center

Clinton Community College

- Social Services Assistance
- Health Services Assistance
- Small Business Assistance
- Local Government Assistance
- Computer Assistance
- Educational/Training Programs

Empire State College

- Regional Health Planning
- Environmental Analysis and Planning
- Social Services Planning for the Disabled
- Training and Other Programs for Work Force Development

Fulton - Montgomery Community College

- Flexibility in Meeting Area Business and Industry Training Needs
- Technical Information and Expertise (combined with knowledge of local conditions)
- Training Programs in: team building, quality assurance, computerization, manufacturing techniques, and safety

Herkimer County Community College

- Business Assistance
- Management Training
- Tourism Training
- Social Services Staff Development
- Arts and Crafts Programming

Jefferson Community College

- Small Business Development Center's assistance to local entrepreneurs
- Madison Barracks Training Site (dedicated instructional kitchen and small conference facilities)
- Satellite Teleconferencing

Mater Dei College

- Social Services (Parenting Workshops)
- Health Services (opticiary, alcohol dependency counseling)
- Environment (zebra mussel research, recycling, conservation activities)

Mohawk Valley Community College

- Economic Development Assistance
- Social Services Assistance
- International Trade/Investment Assistance
- Technology Transfer

North Country Community College

- Small Business Assistance
- Social and Health Services
- Computer Assistance (PC)

Paul Smith's College of Arts and Sciences

- Environment
- Forest Management
- Urban Tree Management
- Hospitality
- Tourism
- Culinary Arts

St Lawrence University

- Canadian Relations
- Environmentalism/ecosystems
- International Economic Relations
- Outdoor Education

State University College of Environmental Science and Forestry (ESF)

- International Environmental Studies
- Forestry, Soil, and Water Studies
- Wildlife, Fisheries, Great Lakes, Ecology
- Wood Products Engineering, Materials, Preservation, and Coatings
- Environmental Chemistry, Polymers
- Paper Science and Engineering
- Forest Engineering, Water Treatment, Waste Water Management
- Hazardous Materials Handling and Management
- Landscape Architecture, Wetlands Identification and Management
- Environmental policy, Communication, Regulations

SUNY Canton College of Technology

- Management Education and Training
- Small Business Assistance
- Emergency Medical Technician Training
- Real Estate Training
- Rural Enterprise Alternatives
- Industrial Training in Computer Numerical Controls, CAD/CAM and Industrial Motor Controls
- Automotive Technician Education

SUNY Institute of Technology at Utica/Rome

- Management Assistance Center
- Gannett Gallery
- Technology Policy Center
- Small Business Development Center
- Small Business Institute
- Community Forum (local issues television program)

SUNY Oswego

- Business Industry Center
- CITT - Center for Innovative Technology Transfer

- Total Quality Management - through Business Administration department
- Public Education Specialists (at both undergraduate and graduate level)

SUNY Plattsburgh
- Technical Assistance (computerized data bank for NNY)
- International Business Center
- Environmental Issues
- Canadian Studies Center

SUNY Potsdam
- Music and Performing arts
- Fine Arts
- Public Education
- Computer Assistance
- Economics and Labor Relations Research
- Seismic Network
- Social Services Staff Training
- Rural Services Institute

Utica College of Syracuse
- Gerontology Education
- Clinical Medical Education

Wadhams Hall Seminary College
- Social Services
- Religious Education

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RURAL ISSUES AND POLICY DEVELOPMENT

Judi Ewings — Australia

DEFINING RURALITY AND GEOGRAPHIC ISOLATION

The Queensland Government (1994) defines rural Queensland as 'including all communities outside the Brisbane and Moreton statistical areas.' The definition used in this paper is the generally accepted one from the literature relating to geographic isolation and is more specific. This definition recognises that educational, social, cultural and economic disadvantage begins to be experienced more than 100 km from a service centre. Using this criteria, the Department of Employment, Education and Training (1993) identified approximately 90% of Queensland as geographically isolated.

Issues and concerns exist within all groups in society with the level of importance of these issues being dependant on the extend to which they effect and impact individuals' and society's needs. Government regulations and policies determine many of these issues. How well the regulations and policies satisfy the issues and the needs combines a number of elements. The first is to identify the issues,then the substantive policies impacting on these issues and finally consider how well the policies resolve the issues.

ISSUES AND NEEDS IN GEOGRAPHICALLY ISOLATED AREAS

A range of state and federal policy documents, reports and research papers cited in the bibliography have identified the following issues which impact on rural and geographically isolated populations:

- isolation seriously limits the range of experiences available to the family
- distance to, or lack of services - professional support systems (Family Services, etc.) , traditional agency support (play groups, child care, pre-schools on one location multifunction (cultural and developmental needs of ATSI groups), mobile services (playgroups, toy libraries etc.)
- continuing Government cuts to professional support systems and budgets
- lack of cohesive State and Federal Government policies which relate to family services in rural areas
- sense of powerlessness over policies made in urban areas on resources and services
- antipathy towards, and apathy about direct community involvement in some services or lack of skills in accessing/advocating for services
- social structures and power bases which are different from urban areas
- extended role demands in the family requires a wider range of problem solving skills than for urban families
- lack of previous modeling in a rural society creates difficulties for parents changing previous parenting patterns
- influence of climate/economy on rural families - emotionally, socially and educationally
- evidence of extremely high levels of rural suicide and trauma
- rural social bias towards male input to parenting
- parents unaware of educational choice and alternatives available
- low cost rural housing versus scarcity of family and social services
- possible promotion versus disruption to previous life style, connection to extended family
- compounding effect of being in a number of target groups, i.e. Aboriginal and Torres Strait Islander, low socio-economic, disabled AND geographically isolated
- low income parents do not establish habits associated with high levels of literacy
- insecurity of rural occupations
- lack of job opportunities places stress on family and may involve young people leaving home and moving to metropolitan centres
- hidden poverty
- limited access to cultural and sporting activities
- limited local job opportunities
- limited attitudes and aspirations
- hearth and welfare
- restricted access to specialist services

- lack of awareness of socioeconomic cultural locational and ethnic diversity in geographically isolated students

Specific issues relating to education include

Educational opportunities

- lack of academic challenge
- impact of time/cost/distance factors for geographically isolated students
- limited curriculum choice
- limited resources
- limited social, cultural experiences
- inexperienced teacher support
- rapid turnover of staff
- lower educational expectations held by some parents in rural communities
- limited role models
- lack of sufficient access to fulfil educational aspirations
- limited access to work experience and vocational practice which ensure geographically isolated
- students receive appropriate training
- limited attitudes and aspirations
- compounding effects of disadvantage
- lack of peer stimulation

Supportive school environment

- curriculum inappropriate to geographically isolated students
- limted access by geographically isolated students and home based learners to support mechanisms and structures
- management of curriculum in geographically isolated areas
- limited local job opportunities

Equity

- inability of communities, parents, teachers and students to access and advocate changes to existing practices
- establishmentofa clear view ofa socially just environment for geographically isolated students
- differing priorities for education between communities, parents, teachers and students
- restricted access to special needs support
- limited access to cultural and sporting activities
- maximise quality educational outcomes
- lack of exposure to diversity of motivating role models
- limited opportunity and experiences to extend literacy and numeracy skills
- degree to which retention for 12 years at school contributes to social economic and individual development
- male/female retention rates in education which may not necessarily improve life opportunities
- identification of 'which' or 'whose' outcomes are being used to measure 'achievement'
- teacher quality
- access to a range of personnel, resources, social, cultural and educational experiences
- national trend towards economic rationalist supermarket approach, further disadvantaging geographically isolated students

Resources (Human and material)

- inexperience of some teachers in geographical isolated areas
- lack of access to professional support for teachers
- inability of teachers to access professional development due to inability of systems to provide
- replacement personnel
- devaluing of teachers as professionals and leaders
- inabilityofteachersto change structures (teaching methods, curriculum and timetabling to meet
- needs of geographically isolated students)
- students travel further to school

However on the positive side, there the issues of

- family empowerment through parenting adults as primary decision makers
- acknowledgement of and links with non-professionals in support roles
- links to all available resources, team work, community support
- versatile personnel
- opportunities for organisational flexibility
- cross age contact
- opportunities for leadership development
- slower pace of life
- school knowledge of students for greater support
- sharing of resources, facilities and activities within the community
- geographic isolation results in greater awareness of public and political issues

These identified issues fall within broad general government policy areas of health, transport, education, trade, local government, housing, lands and primary industries. What then supports or mitigates against policies that will satisfy needs in rural and geographically isolated communities?

WHAT MAKES A GOOD POLICY

Societies in general require and request laws to provide the structure around which to operate. Such laws revolve around a continuous process of community expectations, political direction, to policy and then legislation. A policy is less exact than a law but sets down what a government wants to happen (Ewings, 1993). A law is precise and must stand the test of judicial interpretation. A policy by necessity is more flexible and its implementation can be slowed, accelerated, applied strongly in one area and h~rril', ,l mll in ~nntho r rt~n~nriinrt on whpth~r trip rtovPrnmPnt hplipvp c the nolirv i< for the good of the community or desired by the community. The ultimate test is the ballot box, but the community must question the extent to which they controls policies

The acceptance and therefore the efficiency and effectiveness of any policy depends on the depth of community participation, the support and cooperation of professionals This is not as simple as it would appear. Governments are influenced at three levels, by broad parameters, by current issues and by the desired outcomes.

The broad parameters include:

- global economies
- federal policies
- industry pressures
- economic rationalism, and
- changes in society

Beside these parameters are those issues relevant to the specific policy area and the outcomes desired by the politicians, by the government or by the community. For education, policy, issues and desired outcomes are shown in Figure 1.

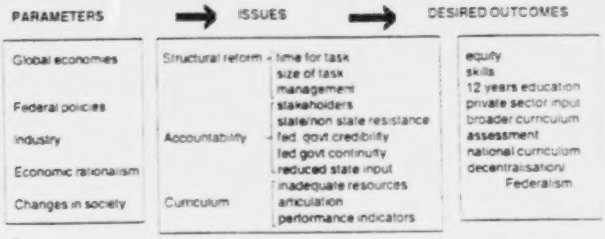

PARAMETERS
ISSUES
DESIRED OUTCOMES
Global economies
Federal policies
Industry
Economic rationalism
Changes in society
Structural reform
time for task
size of task
management
stakeholders
state/non state resistance
Accountability
fed. govt credibility
fed govt continuity
reduced state input
inadequate resources
Curriculum
articulation
performance indicators
equity
skills
12 years education
private sector input
broader curriculum
assessment
national curriculum
decentralisation/
Federalism

Fig 1. **Influences and outcomes of government policy making**

None of the three areas are static and any change in emphasis, any addition or deletion creates a new interrelatedness between the elements and results in a new set of variables to impact on decisions about policy These parameters, issues and outcomes exert influence on all levels of government policy development and implementation While Ministers may officially 'make' policy (Davis, 1993), the actual task of scanning, developing and writing falls to policy advisors and departmental executives Often policy development is undertaken from central policy positions often removed from the site of delivprv hv nrtlir" ~ri~•i<nrc Qflri rionortm~_+1 executives who may or may not agree with the government's stance on particular issues Indications of possible slippage in policy·development and implementation is set out in Figure 2

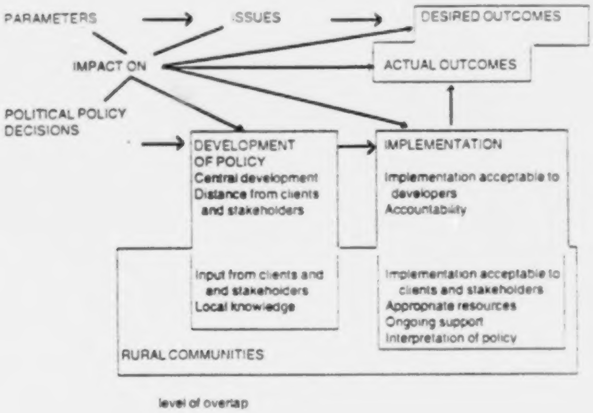

PARAMETERS
ISSUES
DESIRED OUTCOMES
IMPACT ON
ACTUAL OUTCOMES
POLITICAL POLICY DECISIONS
DEVELOPMENT OF POLICY
Central development
Distance from clients and stakeholders
IMPLEMENTATION
Implementation acceptable to developers
Accountability
Input from clients and and stakeholders
Local knowledge
Implementation acceptable to clients and stakeholders
Appropriate resources
Ongoing support
Interpretation of policy
RURAL COMMUNITIES
level of overlap

FIGURE 2 **Policy development and implementation**

Even if the policy developers are in general agreement with the government and societal principles, their individual perceptions, knowledge and beliefs will colour the format, content and language of the policy

Joining the policy developers is the 'policy community' (Jackson 1990), those stakeholders, lobbists and community members who respond to the draft policy documents These stakeholders and community members in turn will either agree or disagree with governments and society lines and if the consultation is a truly participative one, their broad perceptions will be added to policy documents

CLASSIFICATION OF POLICIES

Jackson (1990) maps policies into the following typology:

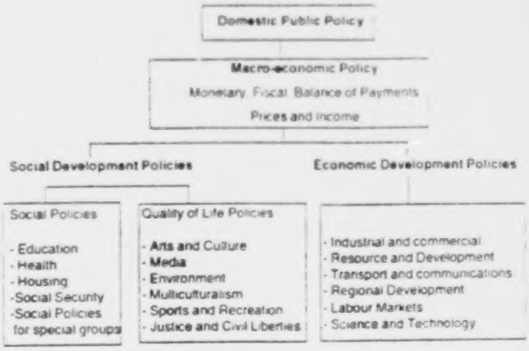

Domestic Public Policy
Macro-economic Policy
Monetary Fiscal Balance of Payments
Prices and income
Social Development Policies
Economic Development Policies
Social Policies
- Education
- Health
- Housing
-Social Security
-Social Policies for special groups
Quality of Life Policies
- Arts and Culture
- Media
- Environment
- Multiculturalism
- Sports and Recreation
- Justice and Civil Liberties
- Industrial and commercial
- Resource and Development
- Transport and communications
- Regional Development
- Labour Markets
- Science and Technology

Figure 3 **A typologly of public policy arenas**

The position policies have in Jackson's typology, indicates a level of effectiveness Departments or agencies operates in accordance with the governments' macroeconomic policies and attempt to maximise their budgets through lobbying or competing with other departments Policies have greater acceptance and are more effective where the lobby groups within each department can come to a general agreement The number of competing factions in an area will lessen the effectiveness of the outcome Agreement is often easier in areas of the economic development because of the tangibility of financially related matters than in areas of social development where values, judgements and emotions impinge on decisions and outcomes

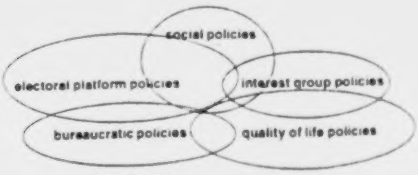
Classifying the rural issues listed earlier into policy areas, a majority will fall under the umbrella of the Social and Quality-of-life policies Those in the Economic Development arena are easier to define, are less subjective because of the tangible nature of the content, and therefore are easier to implement, assess and manage There are less of the social justice underpinnings, perceptions, personal judgements and challenges of subjective views for example in road transport than for special needs or health provision Winders (1991) sets out a different taxonomy of policy analysis:

- electoral platform policies - direct outcomes of election platforrns and usually developed by a small group, and usually represent a trade off on political stakes
- personal policies which are the personal expression of one ora political strategy
- interest group policies are the outcomes of a major interest group
- bureaucratic policies develop from what the departmental bureaucracy wants
- second layer bureaucratic policies come from agencies outside a particular policy area, e.g. ethnic affairs, anti-discrimination. While many of these instrumentalities are part of one bureaucratic area they use a variety of control mechanisms to achieve their goals
- media instigated policies result from an existing 'hot issue' where existing policies may be changed quickly to defuse a political situation
- me-to-ism policies may emerge from policy statements in another area, where one bureaucratic area does not want to be seen not having a statement or policy on a sensitive issue
- reflective policies result from careful research, new knowledge, information and approaches
- representative and expert committee policies are developed by statutory boards, commissions, committees or councils This is an area which provides most evidence of 'participation' from clients and stakeholders
- professional policies emerge from a broad culture of practice

- umbrella policies are the expression of deep seated needs and values, but are usually provided in broad statements

Policies that relate to issues of rural and geographically isolated communities fallmainly in Winders' electoral platform policies (e.g. roads, health services, education); interest group policies ; and bureaucratic policies. While all policy developers would like to think that their policies come within the reflective policy category, it is the competing pressures for political acceptance and budgetary constraints which rule the day.

An analysis using both Jackson's and Winder's work indicates a possible combination of which classifies rural policies is shown in Figure 4. Electoral platform policies int est rou policies.



Rural Policies

FIGURE 4

Issues for education in rural and geographically isolated areas are covered by the Government's Social Justice Policies and Strategies. These are social policies high on the electoral platform because of their emotive nature, they are supported by interest groups into a central pattern for the 'betterment' of society. This configuration subjects them to every possible political vagury.

There is an imperative to understand the context and strength of social and economic parameters which impact on rural policies, to understand how reform packages are made up, by whom and why (Ruby, 1991); to be aware of levels of government influence (Sharpe, 1991) and the steps that clients and stakeholders need to take in order to better contribute and participate not only in the implementation stage but more importantly in the developmental stage. Work by Hattie (1993), Fasano and Winder (1992) and Davis et al (1993) sets out very clearly steps and strategies in gaining the background, a knowledge of the infrastructure and the strategies necessary to input into policy development. Rural communities need to be able to negotiate from a position of rural strength and unity. They need to understand each of the political elements, how to combine them to produce strategies and actions to advocate for projects and outcomes and influence Ministers. This understanding will result in well informed and wise input for effective policies for rural issues.

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SOCIOLOGICAL FACTORS IN RURAL COMMUNITIES THAT IMPACT THE ENTRANCE AND UPWARD MOBILITY OF FEMALE ADMINISTRATORS AND ADMINISTRATIVE ASPIRANTS IN PUBLIC SCHOOLS

Steven J. Hite, E. Vance Randall, and H. Kathryn Merrill — United States of America

ABSTRACT

"Right after I had been hired as a principal, I came into this building ... this inspector came to look at the kitchen ... when he came out he said 'Why aren't you married and home?'" (Green #12, interview conducted in July, 1993)

"One day one of the men that was on the [selection] committee came to my room ... and he said 'Well, it would have helped if you had been male.' And I said, 'That is against the law.' And he said, 'Well, we know that you wouldn't sue us.'" (Green #13, interview conducted in July, 1993)

Women who are in administrative positions, and those who aspire to enter the administrative ranks, are highly likely to encounter barriers which range from subtle cultural prejudice to outright illegal discrimination. Identifying what those barriers are is an essential step toward removing unnecessary obstacles from the path of qualified and suitable female educators. This report begins to address the deficiency of past studies which ignored the different educational settings in which female administrative aspirants find themselves. Specifically, this qualitative study will report on

some of the sociological factors that influence a woman's ability to enter and rise within the ranks of public school administration in rural communities.

Experiences such as those illustrated in these two "snippets" are sadly more common than many people recognize. Women who are in administrative positions, and those who aspire to enter the administrative ranks, are highly likely to encounter barriers which range from subtle cultural prejudice to outright illegal discrimination. Identifying what those barriers are is an essential step toward removing unnecessary obstacles from the path of qualified and suitable female educators.

Themes associated with women in educational administration center around three key questions: 1) why are there proportionally fewer women in administrative positions than men; 2) what contributes to gender disparity in administrative positions; and, 3) what are the current employment trends of women in educational leadership positions? Interestingly, the literature treats women and the settings in which they find themselves as though they are a monolithic group. For example, there has not been a serious investigation of the differences between working and living in a rural verses urban districts, relative to the issues surrounding female administrators and aspirants. This report begins to address the deficiency of past studies which ignored the different educational settings in which female administrative aspirants find themselves. Specifically, this study will report on some of the sociological factors that influence a woman's ability to enter and rise within the ranks of public school administration in rural communities.

THE LITERATURE

Research in the general field of women in leadership positions has achieved a high level of public awareness in certain areas such as business (for example, Morrison, White & Velsor, 1987). However, research dealing with women in educational leadership has received much less publicity. The reason this disparity is especially intriguing is that education is, and has been for decades, a profession clearly dominated (at least at the teaching level) by women. It is curious that women have been unable to achieve leadership positions in a female-dominated field to any significant degree. The relatively passive public reaction to this trend stands in stark contrast to the fervor of the emotion developed when considering female under-representation in such male-dominated areas as business, medicine and law.

In an attempt to better understand the under-representation of women in the ranks of public school administrators, the following review focuses on the following issues: 1) internal and external barriers; 2) explanatory models; 3) prejudice and discrimination; 4) networking, and, 5) mentoring.

Internal and External Barriers

The literature dealing with women in public school administration has used the distinction of internal verses external barriers as a common framing of the different types of difficulties encountered in job appointments and advancement. While the use of these terms is fairly wide-spread, precise and accepted definitions are not easily identified.

Internal Barriers. In general, internal barriers are taken to mean those obstacles which women or society create, choose, exercise and/or maintain. Examples of internal barriers presented in the research literature are: geographical mobility (Hite, Kreuger & Basom, 1994; American Association of School Administration, 1982; Biklen, 1980; Darley, 1976); role conflicts between "female" personality characteristics and "male" job expectations (Lunenburg & Ornstein, 1991; Jones & Montenegro, 1982); negative self-image (Shakeshaft, 1989, 1987, 1981); sex-role socialization (Lunenburg & Ornstein, 1991; Adkison, 1980-81); and, low career aspirations (Lunenburg & Ornstein, 1991; Marshall, 1985).

While many of these barriers are referred to as mere stereotypes or beliefs in the literature, they still exert powerful influences in the lives of many women. From the perspective of constructivism (Denzin & Lincoln, 1994; Guba & Lincoln, 1994; Guba, 1990), whether these barriers are actually "real" or not (that is, natural or fabricated) is secondary to the notion that if the individual accepts, believes and orients their life according to the barriers, then these barriers are *de facto* "real." Internal barriers, then, can and often do exert an important and powerfully negative influence on the ability of women to enter and advance in school administration, regardless of whether they are unavoidable features of nature or personal constructions of reality.

External barriers. External barriers are those curtailments on opportunity which are part of the educational or social "system"; they exist outside of the control and influence of an individual administrator or administrative applicant. Among the more consistently noted external barriers are: family responsibilities (Edson, 1987; Shakeshaft, 1989; Marshall, 1985; Lange, 1983; Jones & Montenegro, 1982), lack of sponsorship or mentorship (Mitchell & Winn, 1989; Hampel, 1987; Harder & Waldo, 1983); sex-role stereotyping and discrimination (Lunenburg & Ornstein, 1991; Shakeshaft, 1989, 1981); and, lack of access to networks (Hurley, 1994; Rees, 1991; Martin & Grant, 1990; Shapiro, 1984).

Many of these external barriers are recognized as long-standing fixtures of the educational system. Yet, as in other professional settings, they staunchly persist in a social era that would seemingly render them unacceptable. Internal and external barriers, then, provide perhaps the broadest frame of reference for the issues surrounding the difficulties encountered by women as they attempt to become administrators, or move "up the ladder" in the educational system.

Explanatory Models

In an attempt to understand the structure and function of the barriers women encounter in public school administration, three basic models have been developed. Originated by Suzanne Estler (1975), and subsequently used by other researchers (Grady, 1992; Dopp & Sloan, 1986; Harder & Waldo, 1983; Lyman & Speizer, 1980), the barriers to administration have been rendered in the following models:

1- The "Women's Place" Model assumes that women are socialized differently than men, with an emphasis on role distinctions. The fact that many women choose to apply for specific types of jobs, such as elementary (young children and nurturance) verses high school (older students and discipline) principalships, is attributable to the role-distinction socialization of women.

2- The "Discrimination" Model asserts that there are direct efforts by one group (in power) to exclude another (outsiders) from participation. These efforts lead to hiring and promotional practices which favor a certain group of individuals (men) over another (women).

3- The "Meritocracy" Model declares that the most qualified applicants are hired for a given position. The fact that more men than women are hired, particularly in certain positions, means that men are simply more qualified than women.

Most research, including Estler's original paper (1975), has discredited only the meritocracy model as a legitimate possible explanation for female underrepresentation. While the "women's place" and "discrimination" models continue to have credibility, it must be kept in mind that they are not considered to be mutually exclusive descriptions of the difficulties encountered by women. In the world of complex bureaucratic and social interaction, a number of constraints might be simultaneously engaged in the hiring and promotion process. These two models should be taken as providing a potential structure in which particular barriers, such as those which follow, can be framed and engaged.

Prejudice and Discrimination

The existence of prejudice and discrimination in the hiring and advancement process against women is asserted in most of the research literature (McGrath, 1992; Martin & Grant, 1990; Edson, 1987; Biklen, 1980; Estler, 1975). Most difficulties in this area are related to social attitudes (stereotypes) about women's competency levels. As presented in Biklen (1980), women are seen as:

1- too emotional;

2- not sufficiently task-oriented;

3- too dependent;

4- lacking independence and autonomy;

5- nurturant, with the ability to follow directions in a tight, bureaucratic, hierarchical structure, but unable to construct or dominate a structure.

The practices and policies that follow quite naturally from these attitudes lead to actions by many school boards and districts which would be considered prejudicial and discriminatory. Two primary difficulties in this arena are: socialization and stereotypes are typically deeply seated in the history and structure of a given culture; and many women themselves see no difficulty with these stereotypes because they are an integrated part of the host culture that enacts and perpetuates these actions. The result is that while these practices continue to assert the largest influence on limiting women, they are the most difficult to influence or change.

Networking

As with all societies, educators tend to cluster into informal groups of affiliation. In educational administration, women consistently have difficulty entering and/or accessing the informal network(s) controlling entry and advancement (Martin & Grant, 1990; Whitaker & Lane, 1990; Gotwalt & Towns, 1986; Marshall, 1986; Edson, 1978). The result of not having access to the "good ol' boys network" is that female aspirants: lack the honest feedback necessary to improve and hone their professional skills (Pigford & Tonnsen, 1990); fail to obtain critical districtwide information concerning the "real" requirements for a position (Edson, 1978); and, experience less opportunity to display important skills, attitudes and knowledge to those who make the hiring and advancement decisions (Edson, 1978).

Exclusion from these informal networks has meaning beyond the local setting. Local networks tend to extend to regional networks, then on to national networks. When informal local networks remain unavailable to female administrators and aspirants, they are excluded from potential career enhancement and advancement at the largest geographical scale, and superintendencies are seldom accessible (Rosser, 1980).

Mentoring

While informal networks reflect the power structure at the macro level, individual mentors and sponsors can fulfill many of the same functions as networks, but at the micro level. Female administrators and aspirants, however, experience a number of difficulties that men do not. For example, since most administrators (e.g. potential mentors) are men, the issue of the appropriateness of developing close male/female relationships is of concern. Marshall (1985) points out that male mentors can be reluctant to invest their efforts with female aspirants because close male/female relationships are most often seen as unprofessional.

Thus, female mentors and sponsors would appear to be the natural answer. Unfortunately, a scarcity exists of women occupying appropriate positions in administration for mentorship (Whitaker & Lane, 1990). Whatever female mentors may be available tend to be in positions which lack influence, relative to their male counterparts (Martin & Grant, 1990).

Women, then, are in a position where they must seek out sponsors who are both willing to engage in professional relationships that have the potential of being misinterpreted and are sufficiently influential (Rees, 1991). The highly reduced pool of potential mentors available to women clearly becomes a significant problem to those who seek entry and advancement in educational administration.

SUMMARY

While women comprise the majority of teachers in the current educational system, they remain significantly under-represented in the administrative ranks. Those female teachers who attempt to enter and advance in administrative positions encounter a number of significant obstacles, ranging from sex-role stereotyping to exclusion from networks to direct prejudice and discrimination. While these obstacles have been researched for a number of years, no focus on the barriers experienced by women in rural districts has been attempted. The difficulties encountered by women must addressed at the various levels of their experience, not simply as though they are one monolithic group.

METHODS

The research being reported in this paper is an extension of an earlier census of male and female holders of administrative certificates in New Mexico, Utah and Wyoming (Hite, Kreuger & Basom, 1994). Analysis of the 2,254 respondents to this previous census indicated the need for personal interviews with female holders of certificates. An example of the findings that indicated the need for additional inquiry was that men were three times as likely as women to have received their first administrative appointment without ever once interviewing formally for the position. These types of discoveries led to the conclusion that more in-depth inquiry into the nature of the process involved in entering and advancing in the administrative ranks was justified.

Given that the intent of the extended research being described in this report was to explore the process of entry and advancement, it was determined that a qualitative approach would be most appropriate (Bogdan & Biklen, 1992; van Manen, 1990; Marshall & Rossman, 1989). A description of the basic components of this qualitative research project follows.

Sampling and Interviews

A random sample of 40 women was selected from the population of certificate holders identified in the initial study. This sample was stratified by two criteria: whether the person was currently employed as an administrator or not, and, whether the person worked in an urban or rural district. A district was determined to be rural if it met any four of the following five criteria. The district of employment must:

1- have fewer than 10,000 students;

2- not encompass a "standard metropolitan area", as defined by the 1990 U.S. Census;

3- have a human population density less than 150 persons per square mile;

4- have at least 40% of its population living in cities smaller than 5,000 persons; and/or,

5- have no four-year degree-granting institutions of higher learning within its geographical boundaries.

Once the sample was selected, an interview was scheduled at a time and location established at the convenience of the woman being interviewed. The interview was conducted by a female high school teacher and current doctoral student at Brigham Young University in educational leadership, Lillian Zarndt. Each of the interviews lasted from one to two hours, were tape-recorded, and later transcribed. The interview format was purposefully kept very simple. Each participant was asked to respond to the following questions:

For those currently employed as administrators:

1. Did you encounter any barriers while pursuing your first appointment to public school administration?

   If so, do you believe those barriers were encountered specifically because you are a woman?

      Do you believe that those barriers would have been different for a male applicant?

   If not, do you believe other female applicants experience gender-specific barriers?

      If yes, why do you believe your experience was different than other female applicants?

2.- The above series of questions would next be applied to the issue of advancement.

   For those NOT currently employed as administrators:

   What do you believe were the reasons you have never been hired as an administrator?

> *Do you feel free to discuss any specific events that actually happened while you were interviewing that you believe demonstrate any of the reasons you have given?*
>
> *Do you believe that female and male applicants are treated differently in the process of hiring administrators?*
>
> *Do you believe that your experience in the hiring process was different from other female applicants?*

Consistent with this semi-structured interview format, the interviewer attempted to exert as little influence on the response of the subject as possible. In addition to the interview, a brief demographic questionnaire was administered to collect information on items such as: age; number of years completed as a classroom teacher; number of years completed as an administrator; college degrees held; etc. This information was not collected to establish or enhance the generalizability of the research but rather to simply help describe the respondents.

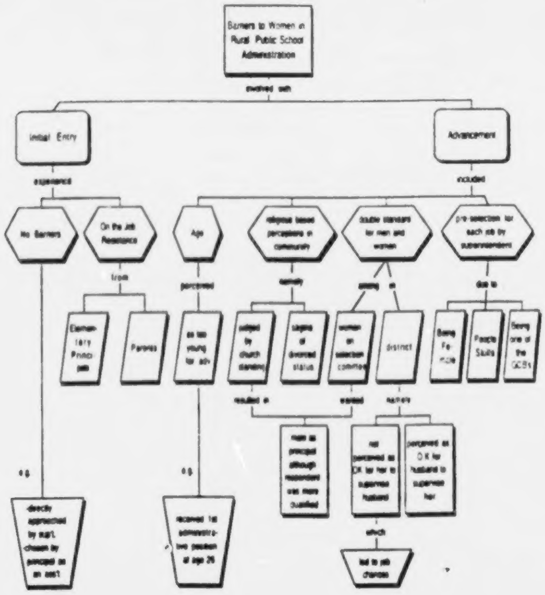
Information Analysis

The primary form of information analysis used in this study was the construction of concept maps for each of the interviews, using techniques described by Novak (1991) and Novak and Gowin (1984). Concept mapping was chosen as a reasonable way to represent the interview information, given that the main priority in this analysis was to accurately preserve the ways in which the respondents presented their own "cognitive or semantic schemata-categories of meaning" (Marshall & Rossman, 1989, p. 10).

The rendering of the interviews was accomplished by a research team chosen specifically to add credibility to the accuracy of the concept maps. Given that a team comprised of individuals too much alike would increase the potential for a skewed rendering the individuals assigned to this task were: an anglo female doctoral student; an anglo female undergraduate student; an Asian Indian female doctoral student; and, an anglo male doctoral student.

The concept mapping team was required to map each interview on their own and then meet to come to agreement on a final "consensus" map. The diverse nature of the team, combined with the individual and consensus mapping exercises, created concepts maps most likely to represent the orientation of the respondents. Examples of two finalized concept maps are presented in Figures 1 and 2. The demographic information was compiled into frequency tables. Selected characteristics are presented for the interest of the reader in Table 1.

Figure 1: Concept map of the perceived barriers of a female administrator in a rural public school district


Barriers to Women in Rural Public School Administration
involved with
Initial Entry
Advancement
experienced
included
No Barriers
On the Job Resistance
Age
religious based perceptions in community
double standard for men and women
pre-selection for each job by superintendent
from
perceived
namely
among
in
due to
Elementary Principals
Parents
as too young for adv
judged by church standing
stigma of divorced status
women on selection committee
district
Being Female
People Skills
Being one of the GCBs
resulted in
wanted
namely
man as principal although respondent was more qualified
not perceived as OK for her to supervise husband
perceived as OK for husband to supervise her
which
led to job changes
e.g.
e.g.
directly approached by supt. chosen by principal as an asst.
received 1st administrative position at age 26

FINDINGS

The findings presented in this paper were drawn from the concept maps of the 40 interviews described earlier. The focus of the extraction of information from the concept maps was on the sociological factors mentioned by the respondents. By sociological factors we mean those things which are a clear product of the host culture such as social role expectations, as opposed to institutional factors such as availability of positions, or the meeting of state mandates. In general, the sociological factors that impact the ability of a woman to enter and advance in public school administrative positions cluster along two dimensions: religion; and, social normative expectations.

Religion

As opposed to larger urban settings, religion in rural districts is much more likely to be a serious barrier for female administrators and aspirants. Difficulties associated with religion tended to be expressed in two specific areas: denominational affiliation; and, marital and family status.

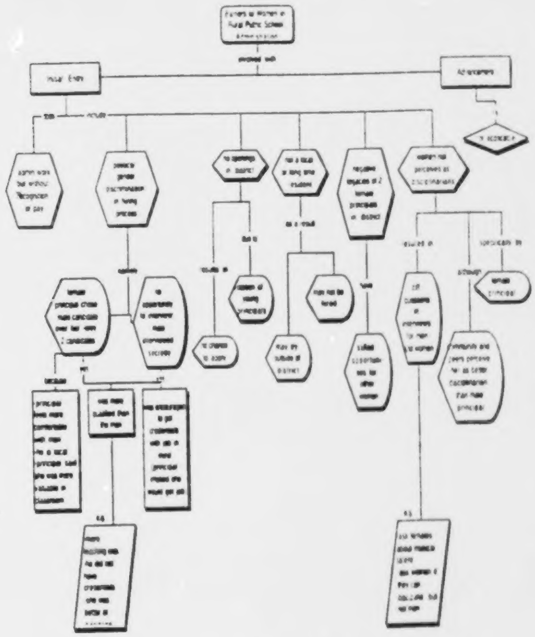
Denominational affiliation. Rural communities, as reported in this study, tended to be dominated by one, or at most two, denominations. In a rural setting the religious affiliation of the applicant, as it is compared to that of the superintendent and/or the majority (or all) of the members of the school board, was very likely to influence hiring and advancement decisions. Following are examples of the responses given in the interviews.

> "I'm a minority in a lot of ways. You know, I am not <dominant religion>, and I am a woman."
>
> (Green #1, interview conducted in July, 1993)
>
> "... again, I hate to keep going back to religion, but religion is an issue in a small community like this - it really it an issue."
>
> (Green #5, interview conducted in July, 1993)
>
> "The dominant religion right now has a high influence on who becomes an administrator. I have heard parents say 'well he's so and so in this church, so I believe what he says.' ... parents have a tendency to put more reliability on the men if they have a church position."
>
> (Green #7, interview conducted in July, 1993)
>
> "I'm not <dominant religion>, you know, and somehow it always comes out, it always comes out. It's real subtle how it comes out in an interview ... there's little words or little this or that, and it's real obvious that you're a member."
>
> (Green #12, interview conducted in July, 1993)

A further complication is that the dominant religion(s) in rural towns tended to define roles for women in very traditional ways. Role expectations that are promoted, sanctioned and maintained by religious belief are much more deep-rooted than roles that are an artifact of general (perhaps more cosmopolitan and urban) society. The fact that the religious influence tended to focus on traditional roles for women was also the dimension that made religion a more negative factor for women than men. A man who is not of the dominant faith, for example, does have some religious bias to overcome, but because it is deemed by the dominant religious persuasion appropriate for men to work, belonging to another denomination is not as fundamentally problematic as it is for women.

Marital and family status. The dominant religion(s) in the rural districts of this study encouraged traditional marriage relationships. Being single, or divorced, was seen as a tremendous liability. Again, this was also stated to be a problem for men, but a more powerfully negative factor for women. Among the of a female administrative aspirant in a rural public school district many responses dealing directly with marriage and family status are the following examples.

Figure 2: Concept map of the perceived barriers of a female administrative aspirant in a rural public school district



> "I would get hate mail, anonymous letters ... that I should be at home with my children ... [I'm] in a culture where the women are supposed to stay at home, they're supposed to be with their families, and here you've got this woman in a position of authority and they just look at you in a another way ... it had to do with religion."
>
> (Green #1, interview conducted in July, 1993)

> "Divorce plays a big factor. People look at people who are divorced and they say, 'oh, well there's a failure there for some reason.' Anyway, that's what some people have said to me. You know, I mean, they've said it right out to me."
>
> (Green #5, interview conducted in July, 1993)

> "You're not quite meeting up to standards in this area if you're not married or if you don't have kids ... that's the hardest thing to deal with in this area."
>
> (Green #7, interview conducted in July, 1993)

The urban interviews did not indicate that marital or family status was a barrier for female administrators and applicants. This sociological phenomenon appears to be prominent only in smaller communities. A possible explanation for this observation was given by one respondent, who pointed out that in small communities people know "everything" about each other and are more interested in knowing personal details of individual lives.

Normative Dimensions

The second theme in the interviews was one of highly defined normative expectations of the rural community. Respondents indicated that their communities had clear expectations in three areas: appropriate roles; personality characteristics; and, physical characteristics.

Female appropriate roles. Perhaps the most frequent difficulty that female respondents mentioned was the common cultural expectation that men and women should be engaged in different activities. For a woman to engage, or attempt to participate, in a role that was seen as "male", was clearly not accepted. Among the many indications of this perceived problem are the following quotations:

> "A salesman came to my school, and he's having this conversation with me. I though 'now, I'm missing something here.' Come to find out, he thought I was the wife of the principal who had been in charge while he'd gone to a conference ... At one point I had a parent who called and wanted to talk to the principal. I said 'this is the principal.' And he said 'oh, it's a <explicative> woman,' and he hung up."
>
> (Green #5, interview conducted in July, 1993)

> "A high school principal once said to me, 'if women would stay at home with their children, we wouldn't have problems.'"
>
> (Green #10, interview conducted in July, 1993)

> "A male member of our board said to one of the female members of our board, 'Why do you want to run? Wouldn't you rather be in the kitchen or bedroom where you belong?'"
>
> (Green #13, interview conducted in July, 1993)

The expectations that women should be doing "female" things was strongly held by both genders in the community. Therefore, while the negative impact of these role expectations accrued primarily to female administrators and applicants, the source of the problem was not gender specific. The pattern of both genders expecting "femaleness" was a source of great concern for the respondents.

Table 1: Selected characteristics of female administrators and administrative aspirants in rural school districts

Characteristic	Administrators	Admin Aspirants*
Median age	46	48
Median # of years in classroom	10	15
Median year of administrative certification	1983	1988
% who filled on-site internships	70%	100%
Mean hours spent in on-site internships	154.7	280.0
Degree level		
BS/BA	0.0%	0.0%
MS/MA	88.9%	90%
EdSpec	11.1%	0.0%
EdD/PhD	0.0%	10%
School level taught, when teaching		
Elementary	50%	66.7%
Junior High/Middle School	30%	33.3%
High School	20%	0.0%

* Administrative aspirants are those female holders of valid administrative certificates who want to be administrators, but have been unsuccessful in acquiring their first appointment

Female personality characteristics. Rural communities apparently still promulgate the notion that "little girls are sugar and spice and everything nice" and "little boys are snakes and snails and puppy-dog tails." As indicated by the following quotation, women are viewed as not being "hard" enough to deal with administrative tasks such as discipline and group management:

> "He [an elementary principal] felt that a male ... had more common sense, that the people in the community could perceive a male as being more in control or better able to handle situations, more analytical."
>
> (Red #8, interview conducted in July, 1993)

The issue does not seem to be whether the particular women applying for the position have demonstrated the ability to handle such tasks as discipline and group management, but whether women per se are suited by their natures to provide leadership in these areas. The tendency toward a commonly held set of assumptions concerning the natures of men and women, particularly the inadequate natures of women, appears to remain ingrained in the rural communities of this study.

Physical characteristics. An unanticipated finding in this study was that the physical characteristics of the women interviewed served as a focal point in a significant number of their attempts at entry and advancement in public school administration. Apparently, there is a strong tendency to believe that administrators must be physically "big", in order to successfully carry out their duties. The "double bind" of this expectation, when it is added to the traditional female role expectation is evident in the following quotations:

> "So when I went in [to the interview] he took his finger and pointed it right at my nose, and shook it, and he said, 'now you're a small person. Just what are you going to do when a mean old codger comes in and tells you that you will change something because of this and that?' Referring to my size and stature, and the fact that I was a woman. Then one of the other fellows came across with a question that was very similar ... 'you're very pretty, you know, and you're a nice, sweet person. What are you going to do when you're faced with these kinds of situations?"
>
> (Red #9, interview conducted in July, 1993)

> "... men are really threatened because I am 6 feet 1 [inches tall], and I am very confident, and I am enthusiastic and exciting, and I do know what I'm doing ... I try very carefully to wear pink and to talk softly."
>
> (Red #17, interview conducted in July, 1993)

The "size" issue is incredibly perplexing. How "big" a person might be is a function of genetics, not personal preference or training. It is (possibly) understandable that physical presence is considered important, given that most administrators for the past decades have been male, and therefore have been on the aggregate physically larger than an average female. This being the case, it could be argued that physical size, being one of the "common denominators" of past administration, is still an important qualification. What is confounding is why physical size would become an issue - in some interviews a central issue - in our current highly complex socio-educational setting.

SUMMARY

Female administrators, and those women who aspire to become administrators, face a formidable and perplexing array of barriers. Religious affiliation, role expectations and gender stereotypes all create obstacles to entry and advancement for women in public school administration. Why so few research efforts have focused on difficulties found in the rural setting is not clear. That there are problems for women who are affiliated specifically with rural districts is adequately demonstrated by this study.

Identifying satisfactory and equitable solutions to gender-specific barriers for women in public school administration remains a problem. While this study has contextualized the barriers in the larger literature base, and focused attention on rural districts, it has not engaged in seeking or suggesting solutions. The goal of this study was to begin rural-specific inquiry in the area of barriers for women in school administration. Perhaps simply being aware of the issues is a significant first step toward addressing the problem of inequitable treatment of women in rural public school administration.

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EDUCATIONAL AND LINGUISTIC ISSUES IN RURAL AMERICAN INDIANS

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ABSTRACT

The purpose of this paper is to discuss the educational difficulties that typically occur with American Indian children living in rural areas. These children typically come from extended families who are maintaining, at least to some degree, tribal traditions. This adherence to tribal traditions as well as the linguistic and cultural diversity that exist from Indian tribe to tribe put these children at risk for school failure. Suggestions of appropriate assessment and treatment programs for children experiencing language difficulties due to linguistic and cultural diversity as well as suggestions for modified educational interactions is included.

The issue of providing appropriate assessment and intervention plans for multicultural children who may be exhibiting language problems is not a new concept. As a profession, we are aware that approximately one out of every four Americans is non-white and it is estimated that 4.6 million of these individuals have communication disorders (Committee on the Status of Racial Minorities, 1987). Within 10 years, it is estimated that one third of all school children will represent diverse cultural and linguistic backgrounds (e.g. African American, Asian American, Hispanic and Native American). As the growth rates of non-white population increase, the number of non-white persons with communications disorders is also expected to increase (Cole, 1989).

Because the largest population growth is projected to be within non-white groups, the caseloads of speech/language pathologists and audiologists will also reflect the increasing number of individuals from diverse cultural and linguistic backgrounds. The revised ASHA Educational Standards Board requirements have mandated that accredited programs prepare current students-in-training to provide speech/language pathology and audiology services to individuals from culturally diverse populations. Furthermore, Standard II: Academic coursework of the revised requirements for the Certificate of Clinical Competence states: "Coursework should address, where appropriate, issues pertaining to normal and abnormal human development and behavior across the life span and to culturally diverse populations" (ASHA, 1991, p. 121).

This multicultural issue has a special significance in the case of Native Americans Indians. The issue has a special significance because these individuals exhibit great cultural and linguistic diversity. There are cultural and linguistic differences from tribe to tribe and differences within tribes as well. Therefore, the purpose of this paper is two-fold; 1) to provide information about the cultural and linguistic characteristics of Native American Indians and 2) to discuss how these cultural and linguistic characteristics impact assessment and treatment issues for speech/language pathologists and audiologists.

CULTURAL CHARACTERISTICS OF NATIVE AMERICAN INDIANS

Native Americans are currently found in every state and most major cities. There are over 400 distinct tribal groups throughout the country. These tribal communities reflect diverse cultures and linguistic patterns. This linguistic and cultural diversity is found not only among tribes, but also within each tribe or even within extended families within a tribe. Various members, for example, of Native American families may have differing levels of acculturation and traditionalism. Grandparents, for instance, may live on the reservation or in a rural area and speak predominantly the native language, while the younger generation may live in the city and speak predominantly English (Hoffman, 1981).

In addition, many Native American Indians live in a bicultural world where they must live within the rule system of the dominant society as well as within the rule system of traditional ways (Joe & Miller, 1987). While many American Indian families are integrated into society, many still maintain their traditional beliefs and customs to varying degrees. Oral history, songs and dances, and different types of ceremonial events are still a part of the culture of most contemporary Native Americans Indians and native languages are still used and taught in many tribal communities (Joe & Malach, 1992).

Another interesting point that impacts our work with Native American Indians is that they are not a homogeneous group. There is a great diversity among tribes. For example, some tribes are much larger than others. Cherokees and Navajos, for example, have sizable populations. Other tribes may number less than 1,000 each. Some tribes may live on tribal lands, while others reside on reservations or in cities. Some Native American Indians may also migrate back and forth between the city and the reservation or rural community.

Finally, in terms of cultural characteristics, there are values that Native Americans hold that are very different from mainstream society. These values include such areas as 1) harmony in nature, 2) time orientation, 3) family roles and relationships, 4) group orientation and 5) acceptance. Each of these will be discussed separately.

Harmony in Nature

The value of harmony in nature can been seen in many Indian tribes by their reluctance to become involved in such activities as mining or mineral development on their land. These groups teach respect for the land and often carry out various ceremonies and rituals to ensure harmony with the land. Cultural conflicts can result when Indian people are asked to choose between encouraging land development that will employ members of the tribe and maintaining cultural values that emphasize protecting instead of destroying the land (Joe & Malach, 1992).

Time Orientation

Another value that is seemingly different from that of the majority culture is the preference Native American Indians have for a present-time orientation (Lewis & Hoe, 1975, Dauphinais & King, 1992). Many American Indians view time is a rhythmic, circular pattern and mark time based on seasons with daily routines determined by the position of the sun or the moon. Additionally, developmental milestones are remembered by trial customs. For example, the family members may not remember when a child walked, but rather would remember when the child has his or her "naming ceremony". Therefore, obtaining data on child development milestones may be confusing or, at best, incomplete.

> An example of a case study demonstrating this point follows. A traditional Indian family whose 2 and 1/2 years old daughter has a repaired cleft lip and chronic otitis media was referred to a speech/language pathologist for early intervention. The pediatrician who made the referral was concerned about speech and language development. The speech/language pathologist went to the home to obtain a case history. She became confused by the responses to questions regarding the child's development. The parents did not seem to remember when the child sat up or began walking. Although the doctor had mentioned that the child talked using single words, the parents stated that the child was not

talking yet. In trying to determine why the parents did not know about developmental milestones, the speech/language pathologist consulted a nurse from the American Indian clinic. The nurse explained that in this Indian tribe, developmental milestones are not valued and that other events are considered much more important. For example, the first day that a child laughs and the day a child is named are considered to be important events. Talking was not considered important until the child was between three and fours years of age. When the speech/language pathologist returned to the home, she asked very different questions and was able to obtain useful information about the child's development (Joe & Mallach, 1992).

Group Orientation

Another value seen with many Native American Indians is the value of being part of a group. Being part of a group which emphasized collateral relationships rather than individual achievements is considered important. This collaborative attitude has interesting implications. For example, American Indian children are not likely to want to draw attention to themselves, but usually prefer to be part of a group. Sometimes, this appears to educators as a passive or non competitive attitude and can impact teachers' perceptions of their behavior in a classroom situation.

Family Roles and Relationships

Native American Indians define family in a broad manner to include extended family members (Malach, et al., 1989). Sometimes other members of the tribe may also be considered part of that family unit. Childrearing often falls to members of the extended family such as grandparents. Also, parents may seek advice from older family members and elders because great value is placed on age and life experiences. In intervention programs with American Indian children who are disabled, elders or extended family members may, in fact, be the primary case manager (Malach, et al., 1989).

Acceptance

Many American Indian tribes seem to accept natural and sometimes unnatural events as they are. This acceptance is representative of the Indian belief that such events occur as part of the nature of life and that one needs to learn to live with life and accepts what comes, whether it is good or bad (Coles, 1977; Kluckhohm & Strodtbeck, 1961).

LINGUISTIC CHARACTERISTICS OF NATIVE AMERICAN INDIANS

A powerful example of the linguistic diversity among Native American Indians can be seen in the state of Oklahoma. Between 1825 and 1887, 59 different native polities were removed to reservations in Indian Territory, which later became the state of Oklahoma. At the time of statehood, in 1907, most members of those 59 federally recognized tribal units spoke their native languages fluently. Today, 86 years later, all of the native languages of Oklahoma are in danger of disappearing within the next half century. Some have already become obsolescent while the others are spoken primarily by elders. Only a minority of native children grow up speaking their indigenous language. Thus, the native speech communities in Oklahoma have undergone a relatively rapid period of language shift and English has now become the primary language in all cases.

At first glance, this would appear to be a remarkable instance of acculturation into the Anglo-dominated social world. However, upon closer examination one discovers that the varieties of English spoken in native communities differ in significant ways from the varieties of English spoken by Anglos in Oklahoma, that the different native peoples of Oklahoma still constitute distinct speech communities, and that in this manner, native peoples continue to use language (even when it is English) to maintain their traditional cultures. Native cultures are marked by distinctive phonemic targets in the variety of English spoken by community members, by differences in the underlying semantic categories that Indian speakers label with English lexemes, and by pragmatic differences in the contexts of usages of English utterances. These distinct varieties of English vary not only from standard Anglo usage, but also from one native community to another. Consequently, language differences continue to reflect cultural differences among the native peoples of Oklahoma. Moreover, because of the unique history by which native peoples from a diversity of language families and cultures arrived in Oklahoma, and because Oklahoma has the largest American Indian population in the U.S., the linguistic and cultural situation in the state is a microcosm of the situation nationwide. The distinctive varieties and usages of English by Native American children have, in a few instances, been studied in single communities (Philips, 1983) and discussed in relation to educational performance in general ways (Fleisher, 1981; Kuhlman & Longoni, 1975) but no systematic investigations of native linguistic usage and its consequence for classroom performance and the assessment and treatment of speech and language disorders have been ever undertaken.

Identifying Normal Linguistic Patterns

Therefore, as a profession, we have several issues to resolve.

First, we must investigate a range of different Indian communities to begin to expose a range of variation in linguistic, sociolinguistic, and cultural frameworks. This is necessary because to predict speech and language problems in Native American Indian children, we must possess a clear understanding of what constitutes normal language development among the different Indian tribal communities. There is a clear need, for example, to help educators understand that many behaviors of culturally and linguistically different children are normal and should be anticipated, given their background (Collier & Hoover, 1987).

Identifying Speech and Language Disorders

Second, we must then determine how speech and language disorders are defined for American Indian children and how that definition differs from what is the standard for the majority population. Presently, for example, American Indian children attending school are expected, as with other ethnic groups, to participate in the classroom in the same manner as the majority population. In addition, if a speech or language problem is suspected, the American Indian children is tested using the same assessment instruments, that, for the most part, were designed to be used primarily with Anglo children. This is not a new dilemma. We, as a profession, have been aware for quite some time that test instruments have focused on substantiating differences among people, thus enabling the examiner to note measured deviance or deficiency and/or place, diagnose or label the child. The outcome, especially with minorities has led to the notion that being different is equivalent to being deficient (Samuda, Kong, Cummins, Pascual-Loene & Lewis, 1989).

Therefore, most standardized tests in language probably underestimate the abilities and aptitudes of linguistically diverse students (Hamayan & Damick, 1991). Although most Native American Indian children are not bilingual, many are Limited English Proficient (LEP). It has been demonstrated that specific American Indian speech and language patterns are different from those of Anglos and are even differ among tribes, even though English was the common language (Cooley, 1979). This difference is addressed, in part, by O'Conner (1989) who stated:

> "a collaborative cooperative group motivated child may evince reluctance or lack of interest in the individualistic, competitive context of test taking. In the domain of language, the mismatch between culturally determined patterns of language use, and the decontextualized genres of test items is a promising area of study for those interested in understanding in detail the interaction of the test taker and the test."

Issues of School Success

The third issue that we must address is the fact the Native American Indians are the most severely disadvantaged of any population within the United States. By adolescence, American Indian children show higher rates of suicide, alcoholism, drug abuse, delinquency, and out-of-home placement than any other ethnic group. School achievement is severely compromised, and many youths drop out before graduation from high school. The American Indian child understands the environment through intuitive, visual and pictorial means, but success in Anglo schools is largely dependent on auditory and language schools. .

This difference compounds existing problems of poverty, dislocation, alienation, depression and heterogenerational conflict and may, at least in part, account for the high rate of emotional and behavioral problems among American Indian children.

The incidence of communication disorders in this population is estimated to be between five and fifteen times higher than it is in the general population (Yates, 1987). In addition, many American Indian children who live in isolated villages or rural setting are never registered in public school, but are taught by using whatever resources are available. Others are enrolled in school, but do not attend due to lack of transportation or insufficient motivation. It is likely that children who do attend school will drop out before finishing the program.

Also, as in majority populations, communicative barriers to success in school may have an organic or phonetic base. Native American children are at relatively high risk for some organic articulation, resonance, voice or hearing disorders. This would include, for example, those disorders associated with cleft palate and cleft lip, which occur in American Indians at a rate nearly twice that of the general U.S. population (Pipes, 1990). Most cases of meningitis (hemophilus influenza type b) are found in Native American Indian and Eskimo children (Habbersett, 1989). Many of these children could require intervention for motor, speech, hearing or cognitive deficits. Assessment of such organic communication disorders cannot be acultural. Rather, culturally sensitive assessment will be necessary if we are to provide a more normal and successful level of communicative function within a range of sociolinguistic communities.

The issue of school success or the lack of it needs to be examined in depth. We must begin to understand why, with each additional year, the achievement gap widens between American Indian children and the majority population. Certainly, we know that the cultural and linguistic differences addressed earlier in this paper that exist between home and school are partly responsible for the problem. More specifically, however, speech and language differences appear to be a major stumbling block to school progress (Little Soldier, 1989).

CONCLUSION

To predict an American Indian child's risk for speech or language problems, we must first sort out the cultural and linguistic differences that may be contributing to English language acquisition. These differences exist not merely between Anglo-American and American Indian communities. Rather, they exist among the different Indian communities themselves. As previously mentioned, each tribal social unit represents a distinct community with unique ways of thinking about and reacting to the world and other members of the community. Likewise, each tribal social unit is a distinct speech community with unique linguistic and sociolinguistic patterns. Sensitivity to these differences in speech, language and communication style will enable us to establish more supportive and effective exchanges with family members when trying to determine the presence of a communication problem.

Finally, when working with Native American Indian families, we must use strategies that are flexible enough to include and incorporate relevant beliefs and values. If we are not familiar with the culture and knowledgeable about the speech and language patterns, then we should include people who are. The most important rule to follow is to treat American Indian families with respect. When we show respect, whatever other shortcomings we may possess in terms of our lack of knowledge about the culture or language of the family tribal unit, become secondary (Joe & Mallach, 1992).

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A FRAMEWORK FOR THE ANALYSIS OF SHARED DECISION MAKING IN RURAL NEW ZEALAND SCHOOLS

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ABSTRACT

The administration of schools in industrialised nations at local rather than central levels over the last decade has resulted in increased interest in the management of education. Over the last decade there have been many changes that have affected the administration of education in New Zealand, although government remains the central funding agency of the school system. All New Zealand schools are governed by Boards of Trustees consisting of six elected representatives; there is no intermediate agency between them and government. The Ministry of Education has become essentially a policy and financial management agency. In 1991 the New Zealand secondary school teachers union, the Post Primary Teachers' Association (PPTA), commissioned research involving Victoria University of Wellington and the University of Illinois at Chicago that would indicate directions for the effective management of secondary schools. The project is designed to test a shared decision making model in which teachers, parents and community members all have equal voices in determining school policy. This paper outlines a methodology for shared decision making in rural schools in remote New Zealand communities, using action research methods to describe management structures and decision making processes and reports on the first part of a longitudinal research programme.

This paper outlines research in four small rural New Zealand schools as part of a larger project which includes a variety of urban schools. The project uses action research methods to explore management structures and decision making processes. The research attempts to document school practices from a theoretical base and to outline both successful and unsuccessful developments in the participating schools. The viability of small rural schools in New Zealand has been the subject of a recent review (Macaskill, 1991) and it is timely to consider the appropriateness of their management in changing economic and political circumstances.

BACKGROUND TO THE STUDY

The administration of New Zealand schools has changed from a high level of central control to a decentralised model in the last decade. At the same time there has been a considerable amount of central government curriculum change and attempts to measure expected standards of performance. A consequence of this is increased interest in management by school principals, boards of trustees and teacher unions.

While there have been many changes in the administration of education in New Zealand it must be realised that this movement is part of a larger shift in industrialised nations towards direct management to local level away from central state authorities. In New Zealand one of the reasons for this management shift was the public perception of central government failure to provide the type of education that many desired, combined with widespread awareness of the need to address inequalities of school outcomes. Education has long been the subject of public debate in New Zealand and, as in all developed countries, is a major area of public expenditure. Accordingly, schools are of interest to both government and economists in terms accountability for the allocation of money at local level. A major item of school expenditure is personnel costs and in New Zealand there have been attempts to replace collective contracts with local or individual contracts. There has also been government interest in the abolition of automatic salary progression for teachers based on service, in favour of financial advancement based 'on merit'. Furthermore, there is government interest in replacing school formulae based on staffing entitlements in favour of local staffing management through a fixed fund. These moves in the funding of New Zealand schools have to be considered in terms of the larger context of labour market de-centralisation and the public's concern about the performance of schools.

The outcome for New Zealand secondary school teachers has been professional, organisational and industrial changes. In 1994 New Zealand teachers face a public that no longer accepts the concept of a profession which is beyond question. The teacher- community relationship is currently being redefined along with professional - client (ie student) relations.

Many New Zealand teachers are confused as a result of rapid changes in the organisation of education accompanied by challenges to their professional standing and public demands for accountability in what is a major area of public expenditure. In 1994 teachers in New Zealand schools are faced with the necessity of forming collaborative relationships with parents, communities and students. They are also involved in a public discussion about the future direction of the teaching profession as well as their own working conditions.

ORGANISATION OF THE RESEARCH PROJECT

The study is organised by the New Zealand Post Primary Teachers' Association (PPTA) - the secondary teachers' union, Victoria University of Wellington and, in a consultative capacity, the University of Illinois at Chicago. The PPTA's interest in this research lies in the changed environment in which it has had to operate since 1990. The necessity for this research project became increasingly obvious following the election of a Labour government in 1984 and the legislation that it subsequently implemented: the 1988 State Sector Act, the 1989 Education Act, the 1988 Public Finance Act and the 1991 Employment Contracts Act. Schools remain under the control of central government although there is now local school governance through elected Boards of Trustees (BOT) consisting of six representatives elected by parents, the principal, a student, one member of the school's teaching staff and various co-opted members. There is no longer an intermediate agency between the local Board of Trustees and the Ministry of Education in Wellington. The Ministry of Education now has the primary purpose of providing policy advice to the minister. Another central institution, the Education Review Office (ERO) conducts quality audits on all schools. Schools in New Zealand are globally funded for all of their operations while teachers' salaries remain under central government control.

The legislation that has been enacted in the last decade has been largely concerned with school management, financial accountability and industrial relations rather than with educational ideals. *Tomorrow's Schools* was published before the 1989 Education Act and contained a number of policy statements about the forms of management that government wished to see implemented in schools and which would, it was argued, improve teacher accountability and performance. The 1989 legislation that was subsequently enacted placed teacher unions in a marginal position in the central policy making processes. The PPTA was largely excluded from award negotiations between 1988 and 1991, it reacted by commissioning a research report on the specific personnel proposals contained in *Tomorrow's Schools* (Munro,1989). This report recommended that the union commission its own research in the face of its exclusion from government policy development. The Munro report noted that a significant obstacle to teacher performance was exclusion from policy decisions which, it was argued, undermined the teaching profession. It was therefore argued by the PPTA and other teacher unions that New Zealand teachers should have a major share in local school decisions alongside BOTs and central government agencies (the Ministry of Education and the Education Review Office).

The PPTA began to advocate a shared decision making model in which teachers, parents, community members and central and local educational administrators have equal voices in determining school policy. Research was needed to obtain information about how parents, students and teachers felt about a variety of issues relating to the management of individual schools.

The focus on shared decision making is important for several reasons. Team work is increasingly favoured in developed societies in place of central government control. Shared decision making as a basis of school organisation provides students with a useful role model of adults working co-operatively to solve common problems. Furthermore, teachers who are excluded from policy making and who have rules and conditions imposed upon them are not likely to be committed to such a system. This research is about the transition from a model of hierarchical control to a model that emphasises collegiality and consensus.

THE DESIGN OF THE PROJECT

In 1991 Roberta Hill was commissioned to design an action research plan (Hill, 1992). Hill was asked to prepare a report which would:

(i) Identify a need for change by assessing present circumstances;

(ii) Develop a research base and an analytical framework;

(iii) Stipulate responses at school level.

As the research developed it became more ambitious. Rather than being the final word on the commissioned topic, Hill's work was to instead become a template of school decision making practices which would be used to encourage experimentation in a selected group of schools in urban and rural New Zealand. In effect, Hill's report became the basis of a long term action research project.

The PPTA, which commissioned the study, selected Victoria University of Wellington's Faculty of Education to implement much of the research in the schools. University researchers brought with them both research skills and experience and, most importantly, were seen by all parties to be neutral in the action research process.

METHODOLOGY OF THE PROJECT

Action research involves groups of people working together to gather and analyse data. The emphasis on action research is on group decision making. Usually the process involves several cycles which include identifying the problem or the need for change, assessing the current situation, planning,

action and then evaluation. This research approach is sufficiently flexible to accommodate a wide variety of situations and, of particular importance in a long term programme that is located in a wide variety of sites, it allows for changing research personnel. It also accommodates changes in the participating researchers themselves as they learn from the process in which they are engaged.

Action research involves:

> "a much more systematic and deliberate investigation of circumstances and the implementation of initiatives by participants, so that they can formulate explicitly the rationale for certain strategies, communicate their perspective to others, and understand clearly what it is that they should be monitoring through the change process. In this sense action research implies theoretical sophistication which links substantive areas of social or technical explanation with thorough analysis of the process of change"
>
> (URCOT, 1992, p4)

In this project the researchers from the PPTA and Victoria University of Wellington both observe and describe the experiences of the thirteen participating schools (nine urban and four rural) and participate in the process of reflection and the change that follows. The participating schools are assisted financially from funds in the project by being provided with expertise, advice, opportunities for professional development and for school networking.

There are two methodological concepts in this research: Analytical Induction and Triangulation (Capper et al,1993):

> "Analytic induction entails a process of iteration which entails feeding back observations and analysis based on gathered data to the school as tentative observations for future action or further investigation. The process whereby the school considers this feedback leads to an increasingly refined focus on key issues. This in turn leads to progressive refinement of the initial tentative observations. This cyclic process will continue throughout the life of the project, but it is anticipated that many schools will continue to use the techniques for self review after the project has ended and the external researchers have withdrawn"

Taylor et al (1990) have observed that analytic induction is:

> "...a very powerful tool in establishing the validity of conclusions from an inquiry...this process helps counter the notion held by some that inductive procedures... can be dismissed as 'soft', lacking in rigorous methodological development, and of dubious validity. In fact, thesestudies usually have a strongly developed system of triangulation for the testing of the data, as described by Hill (1984)"

Triangulation involves the collection of data from a variety of sources and the identification of possibly valid observations based on the descriptions of phenomena from different sources (Capper et al, 1993). In the present research project the initial sources have been:

(i) Questionnaires administered to samples of staff (25%), students (10%), Boards of Trustees (100%) and parents (10%). (Response rates have varied, partly because of the issue of confidentiality).

(ii) Detailed interviews with small groups from each of the above.

(iii) Detailed interviews with the principal, chairperson of the Board of Trustees and the union branch chairperson in each school.

(iv) Analysis of each school's documentation.

(v) nformal observations and conversations in each school.

(vi) Information gained during discussions with key people in the school concerning what elements of the school should be focussed on in the research project.

The use of triangulation of sources, methods and points in time adds to the validity of the conclusions that are reached. As Taylor et al, 1990, point out:

> " logical integration of data from different sources and different methods of analysis into a set of single consistent interpretations leads to valid findings."

APPLICATION OF THE METHODOLOGY

Four principles have been adopted for application in all the participating schools (Capper et al, 1990, pp8-9):

(i) The methodology does not attempt to provide a comprehensive and definitive description of a school's decision making processes. Instead it seeks to identify important issues suitable for more detailed attention. There should be continuing dialogue between the researchers and the school.

(ii) Sacrifices have been made in terms of quantitative data gathering in the interests of not placing a heavy burden on the participating schools. Rather, the iterative technique has been used which enables issues to be identified tentatively and for observations to be increasingly refined through the cycles.

(iii) Tentative observations are made on the basis of the data collected. Where data is congruent, suggesting similar perceptions, these are included in reports. Where there is incongruity, suggesting a wide divergence of perceptions, these contradictions are brought to the attention of the school concerned. Where data from any one of the participating schools diverges from the overall pattern, the exceptions are brought to the attention of the school in a report.

(iv) The use of the reports remains under the control of the school concerned. When a report is presented to a school, members of that institution are invited to respond in one of four ways: whether it is valid and therefore worthy of active attention; whether it is valid but not a priority for school action; whether the school is unsure of its validity and wants further investigation; whether the report is invalid and not relevant and therefore of no further interest.

INITIAL RESULTS

(i) Phase One Reports

The phase one report was published in 1992 (Hill, 1992) and the following section of this paper summarises it. It should be noted that this document stands by itself as a resource for schools appraising their own management structures. The phase one report is, as noted above, a template resource for schools.

The phase one report considered the many changes that have taken place in the New Zealand education system since 1984 as described by teachers, teacher organisations and the literature on educational policy. The paper identified a large number of issues facing the teaching profession and New Zealand education at a time of change. Principals were found to be working longer hours than before the changes began after 1984 but spending less of their time in professional leadership activities. Increasingly, principals were becoming isolated from their teachers and from students as a result of having to spend more time on administrative matters such as school finances.

The role of the teacher unions in schools was seen to be changing. Many differing perceptions of its role emerged because of the fluid situation that teachers found themselves in. Some teachers saw the present project as an attempt by the union to take over the schools while others took the opposite view - that the union was being co-opted by management. Some of the teachers questioned regarded the way that decisions were made in their school as none of the union's business while the majority saw it as central to responsible professionalism.

Many teachers were found to be reconsidering the appropriateness of the management model that was proposed in Tomorrow's Schools and were concerned about its implementation. However, few teachers had a view on what was a more appropriate model of educational management.

Following an outline of the issues facing schools and teachers in particular, the report considered the theoretical foundations of workplace reform (Clark and Meloy, 1990), largely to clarify the appropriateness of the questions that should be asked. It was pointed out that schools in New Zealand face many of the same issues of technological change and consequent restructuring that are having to be considered in the private sector. Just as participative practices are increasingly seen as appropriate in the private sector, so they should be considered in the changed environment of New Zealand schools. It was pointed out that in a major OECD review (OECD, 1990), shared decision making was identified as a fundamental prerequisite for effective school organisation. This involves collaborative planning and collegial experimentation and evaluation. It also means consensus about school norms and goals and leadership that is committed to maintaining this type of development. Finally, the first phase of the research found that student motivation was influenced by the distinctive culture of each school.

(ii) Phase Two — Preliminary Findings

At present the exercise of data gathering has been completed in each of the participating schools and the reports have been delivered to each institution for consideration. There is now a dialogue taking place between each school and the researchers. The findings that follow are of a preliminary nature and relate to issues of partnership between schools and their communities.

As well as interviews with principals, deputy principals, board chairpersons, students and union organisers, a wide range of school documentation was studied, including school newsletters, magazines and other relevant items.

Student Representatives

The 1989 Education Act provided for student representation on school boards. Some students reported that they felt overwhelmed by being the only young person on the school board. In most schools students played a role in management and in some instances an agenda item for receiving a report on student matters was a feature of meetings. In most schools however, students were excluded from discussion relating to personnel and disciplinary matters. Student representatives were usually selected in their last year at school and there was therefore a lack of continuity in this aspect of a school's management structure. However, while the participation of students on boards of trustees worked well in most instances, there was little awareness in the general student body of most schools of what these students actually did, and in many schools, of even who they were. Most students in the schools that are participating in this project are therefore not aware of the management processes that are in place.

Parents' Participation in School Management

One of the fundamentals of the reforms set in place by Tomorrow's Schools is that parents are supposed to know what is best in terms of their children's needs and should therefore be the real managers of education. In reality it has been found to date that most parents are not well informed about what goes on in their neighbourhood school and are not particularly willing to be involved in school management.

Most parents did not see themselves as significant in terms of school management or decision making and stated that they considered it was the teachers' job to determine school policy. Most parents did not see school management as the Board of Trustees' job either. While the majority of parents gave only a low priority to issues of school management and did not wish to be involved in or consulted about it, they stated that they wished to be kept informed about school events and activities. In many instances school newsletters were not found to be an effective means of communication with homes; in some cases it was found that parents could not understand them, largely because of their reading levels. Report evenings for parents have therefore been found to be more effective ways of communicating between school and home.

Parents and Boards of Trustees

Since 1989 Boards of Trustees legally govern New Zealand schools on behalf of parents. In many cases the Board was seen by the community to be remote although most parents expressed satisfaction with the work that they thought they were doing. The New Zealand legislation in 1989 defined the role of the Boards of Trustees as "governance" and that of the Principal as "management" although this distinction has never been clear. In most schools the board and the principal have established good working relations. In terms of making school policy most boards defer to the principal and in some cases boards do not see themselves as appropriate when considering matters relating to the curriculum.

SCHOOL BASED DECISION MAKING IN RURAL SCHOOLS

Participatory management practices are still at an early stage in New Zealand although it is possible to make some tentative observations. The following observations relate to the rural schools in the project (N=4).

There has been initial resistance from some teachers to the introduction of this form of management, particularly from those who have positions of power and influence in the school system. The success of the introduction of participatory management is, in large part, dependent on the performance of the principal and his or her relationship with the board. There has been considerable confusion in the responses of teachers in most of the schools that have been surveyed.

> A critical factor in the success of the transition from hierarchical to participatory management is the relationship between what is said will be done and what actually happens (Capper et al, 1993, p18).

A major problem in the introduction of participatory management remains the veto of the principal. The principal has vested in him or her legal authority, whether or not this is exercised. Most committees in schools in the project went to considerable lengths to ensure that the principal's opinion was congruent with the collective decision that it made.

The implementation of collegial structures requires constant monitoring to ensure that time is not wasted and that duplication does not occur. It is possible for time to be used unproductively through the introduction of too many committees with overlapping functions.

Finally, in no rural school that has been observed so far has the collective management structure been seen to be operating in a way that could be described as productive and harmonious. Although there is support for the introduction of this type of school management in the research literature and in the broader context of the private sector, it may not necessarily be an appropriate management model for all New Zealand schools. This should be clarified as the research progresses.

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POSTER SESSIONS

A PILOT STUDY OF INTERACTIONS BETWEEN TEACHERS AND SENIOR STUDENTS AT THE BRISBANE SCHOOL OF DISTANCE EDUCATION

Beth Belton — Australia

1.00 INTRODUCTION

1.01 Background

The Brisbane School of Distance Education is a State School that provides an education for students studying from PreSchool to Year Twelve. In this school, as in other open learning institutions, the staff of the School are physically separated from their students. Students and teachers interact via a written response, telephone or other interactive technology.

Because of this physical separation the delivery of teaching and learning differs from mainstream schooling. The teacher's role is to mediate the interactions of the student with the despatched learning materials. The purpose, type, frequency and outcomes of the teacher and student interactions that are part of this mediation process, will vary according to the needs of the student. The quality of these interactions will be reflected in the educational success of the student.

The structure and content of the mailed materials are predetermined by accreditation and syllabus requirements and by standards in design and presentation. The production costs and budget constraints limit the flexibility of rewrites and major adjustments when curriculum changes are required. Therefore, the interactions between the teacher who mediates these courses and the student interacting with the course materials, are critical links. Through quality interactions with the student the teacher can ensure that courses can be adapted to cater for individual needs and current curriculum goals.

There is an expanding body of literature being published on Open Learning in Tertiary Institutions. This literature can be applied to the Brisbane School of Distance Education because of the similarity in production and delivery of teaching and learning.

A review of this literature reveals that the physical separation of students from their teachers creates special needs in the teaching and learning processes. These needs are related to:

(i) the heterogeneous nature of the student population because of:
  (a) where they live
  (b) reasons why they are isolated from mainstream schooling
  (c) individual differences affecting the ability to learn
(ii) the frequency of interactions and time lapse between the transmission and receipt of messages
(iii) the impact of and access to technology
(iv) the necessity to develop materials that suit Distance Education teaching and learning which is characterised by:
  (a) a reliance on print materials
  (b) separation of teacher from the development and production of materials
  (c) independent learning
  (d) development of strategies to provide opportunities for interactive learning
  (e) networks across distances
  (f) highly efficient support systems.

1.02 Research problem

From observations, it was apparent that the teacher's interactions with the student have significant impact on the educational outcomes for that student. However, even though these interactions are so critical the when, why, how and satisfaction levels of these interactions have never been analysed and published. The purposes, intent, frequency and effect of these interactions needed to be researched so that this information could be shared.

These interactions are critical links between the student and the community in which the student lives and the teacher and the school community in which the teacher works. To be effective, all stakeholders need to have knowledge and understanding of these interactions so that they can accept some responsibility for ensuring that they reflect quality teaching and learning as well as guarantee appropriate educational outcomes for the student.

A literature review was undertaken to establish that teacher and student interactions are important. The literature review also was undertaken to show how distance education was different from mainstream schooling. Discussion on these differences was then related to how these impacted on teacher and student interactions.

1.03 Research Questions

In order to carry out pilot research on interactions between student and teacher the following research questions were asked

1. Do interactions between students and teachers occur in the Brisbane School of Distance Education?
2. Are these interactions two way? Who initiates them? Do they meet needs?
3. Are other members of the community (other than the student) involved in these interactions?
4. What is the method of delivery of these interactions and how often do they occur?
5. Can any relationships between the category of student and the interactions with the teacher be established?

For this study the research was restricted to the Senior School because rural communities all over Queensland access Senior Courses from the Brisbane School of Distance Education

1.04 Findings and recommendations

The findings and recommendations are made on the basis of the data collected and the analysis carried out

2.00 BACKGROUND AND RATIONALE

2.01 Communities and their relationship

There are two major commuties impacting on the student's learing The two communities have been identified as the school community and for the purposes of this paper, the rural community Diagram 1 represents some of the communities impacting on student and teacher interactions Forces impacting on these communities are related to the member composition and roles these communities have in society The diagram gives some idea of the complexity of these

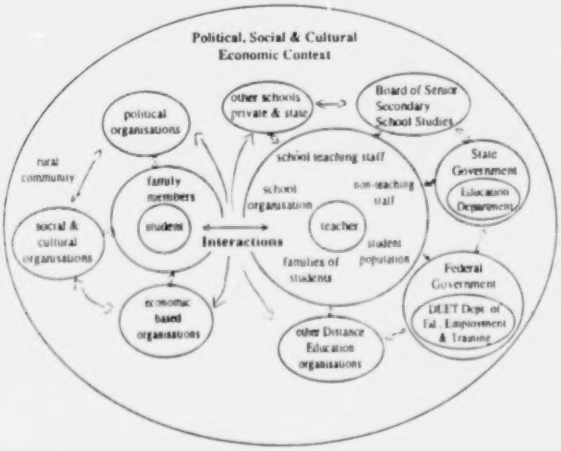

DIAGRAM 1 COMMUNITIES IN INTERACTION

The school community according to the statistics published by the school, March 1994 consists of almost 4000 students and their families There are over 200 teaching and non-teaching staff

Bodies directly impacting on the school community include Open Access who develop the learning materials, and the State Government who allocates resources and defines the role of the school The Board of Senior Secondary School Studies is the accrediting body The Education Department's Regional and Central Office staff set parameters for teaching and learning and eligibility of enrolment These bodies have varying degrees of influence over the purposes, intent, frequency and type of teacher and student interactions

The **rural community** consists of the immediate family and the rural community to which the student belongs The family values and cultural background and the relationship of this family in the community to social, cultural, political and economic infrastructures and power structures will obviously impact directly on teacher and student interactions The value that family and community attach to student and teacher interactions will be reflected in the frequency, purposes, intent and outcomes of these.

Stone (1992) points out that it is important to remember that the institution as well as the student has goals and objectives. A major goal of the institution for the Senior Students at distance education is to provide teaching and learning that will enable students to gain a Senior Certificate. Interactions between teacher and student will specifically occur for that purpose However, the strategies used to develop these will depend on the skills, knowledge and attitudes of the teacher and the student

These two communities are physically separated Willis (1993 3) notes that because students and teachers live in different communities, geographic regions or even states they are deprived of a common community link

This deprivation of a common community link is compensated by links developed through teacher and student interactions. Currently, in the teaching and learning experiences, it is observed that the teaching and learning operates in two separate worlds with only a superficial reference to the two communities involved

Many of the interactions between the teacher and student are one way; they are generally initiated and controlled by the teacher. Garrison and Shale (1990 42) page note that because transactions between teacher and student are at the heart of the education process, distance education address this issue when addressing other constraints of distance.

To develop these interactions into a two way process is the responsibility of both the student and the teacher Both communities to which they belong have resources to contribute Both these communities should affirm and contribute to the teacher and student interactions, identifying needs and working together on solutions. Burge, Howard and Ironside (1991:55) page concluded their study of adult students in the tertiary system by noting that it is time to reconsider how a tutor can best help and nurture a earner through all the cognitive and affective stages of a distance course and

> How the Tutor would respond to the connection imperative - that driving force that encourages adults to connect with people and resources in order to solve problems and move ahead with their learning task

The connection imperative needs stimulus, direction and support from both the student and the school community

2.02 Student population

Holmberg (1986) compared the teachin~learning process of distance education as similar to the model of a thermostat Any change in one part of the circle is compensated for by changes in other parts (Villaroel, 1988 59)

The two communities although working as separate entities are interdependent. Problems occurring in one are reflected in the outcomes of the other Student and teacher interactions provide the opportunity for problems and issues to be addressed. The teacher through this interaction can negotiate or adjust the thermostat so as to meet the student needs. However, it is no use adjusting the thermostat without taking into account the environment on the outside The teaching and learning experiences must be relevant to life in the community

Because the student population is heterogeneous, students have a wide range of needs. Some of these needs are related to the reasons why they are isolated from mainstream school Some are linked to individual differences that affect their ability to learn. Reasons why students are isolated from mainstream schooling are diverse. Many of the students enrolled in the Brisbane School of Distance Education live in small rural communities Students attending small rural secondary schools access subjects from the Brisbane

School of Distance Education to increase the subject choices. It is worth noting that enrolments from school-based students in the School have quadrupled in three years. Students who live the required distance from a local school are eligible by law to access distance education. These students in the School are categorised as Distance Students.

Families may choose to access distance education because it is home based and therefore allows them to develop particular lifestyles, work opportunities, beliefs and values. Other students may have a medical condition that prevents them from attending mainstream schools. Students may have been excluded from a mainstream school because of inappropriate behaviour. Adults or re-entry students may, because of family, work or other commitments, enrol with distance education because of flexibility in time and place. Many overseas and travelling students are also enrolled with this School but because they are not located in Queensland rural communities, they are not included specifically for discussion in this paper.

This school can cater for this heterogeneous group of students because of the structure of the School. It has a specialised system of production, delivery, interactive processes, assessment and evaluation of teaching and learning. These specialised systems prevent distance, ill health, family responsibilities, economic status, restricted human resources and time commitments from becoming barriers to accessing formal schooling.

The course materials are produced in bulk. These courses can not accommodate *student differences*. Different students need different teaching and learning strategies and feedback. During interactions between the teacher and student, identification and understanding of these differences can happen. For example a terminally ill student would require more support and adjustment to timelines than a student studying the same course but located in a small secondary school. The interactions would differ in intent, type and frequency.

The diversity of the School population is further intensified by the individual needs of students enrolled. These differences impact on how readily a student learns. Possible differences are well documented as they are found across all schools.

However, in distance education the physical separation of the student from the teacher results in a lack of visual feedback. This makes it difficult to identify and understand the extent to which these differences impact on the student's ability to learn. Interactions between teacher and student could be via such strategies as home visits or using interactive technology, to ensure correct diagnosis is made.

Some information can be only readily accessed by face-to-face contact. Other members of the family or the rural community often provide critical information that would ensure appropriate intervention or support. Willis (1992) observed that without these visual cues of face to face contact, teachers miss out on conscious and subconscious feedback that is received and analysed and form the basis for adjustments to meet needs in course delivery. Members of the rural community have a responsibility to ensure that special needs of students in their community are identified, supported and communicated to the teacher.

2.03 Frequencyand time lapse between transmission and feedback in teaching and learning

Stone (1992:6) points out that "if ever there was an opportunity for a student to academically procrastinate distance education offers that opportunity". This is reflected in the Brisbane School of Distance Education in the number of absentee notices forwarded to students in rural communities each year. If interactions are not occurring the teacher at a distance is handicapped by not being physically there. If the interactions are so far apart that relevancy and sequencing of the feedback is not possible the teaching and learning that occurs is limited.

Therefore, ensuring student's participation in teaching and learning must be a shared responsibility. The rural community needs people with literacy and numeracy skills. They have a joint responsibility with the school to ensure that students are supported, so that the opportunities for developing these skills are adequately accessed by students.

2.04 Technology

Timmins (1989) surveyed 367 students enrolled in distance education and found that the most effective way of interacting with students as an adjunct to printed study materials was via the telephone (Stone 1992:6). Other technology that provides immediate feedback are interactive computers, interactive videos, facsimile and keylink. According to O'Grady (1993:130) interactive technology is providing distance education with the opportunity to 'leap frog' over some of the anachronistic practices of traditional classrooms.

Student's in ru ral communities need the facilities to access this technology. Resources in rural communities need to be channelled into these to ensure they are available and used.

Gee (1991) noted that the technology associated with Distance Learning in The Small Schools Project in Canada heralds the beginning of the end of an old order. He concluded that using technology allowed small rural communities to access education and was much more effective as an educative process, than using other solutions such as busing students to larger settlements. His report concluded saying that costs were not greater, possibly less. He added that pedagogically, students learned as well and some learned better. Heuristically, he foreshadows a major educational breakthrough has been effected.

Gunawardena (1991) reinforces these findings by pointing out that

> if this technology is developed so as to facilitate learner and learner interaction and group work, motivation, completion rates, student satisfaction and in some situations performance is enhanced (Moore, Thompson, Dirr 1991:29).

The use of interactive technology promises to be a very effective tool for teachers and students. The students and teachers have more opportunities for negotiation, testing of ideas and on the spot problem solving and evaluation. However, as Bates (1991) points out these third generation technologies of distance education cannot be simply transferred into an industrial model. It involves new skills and adjustments to pedagogy.

When considering interactive technology Dunning (1990:26) points out that there are issues of costs, equity, exclusion, standards of quality, obsolescence, development costs, training for teacher and student to be considered. As Bates (1991:13) notes there is a good deal of evidence and theory to suggest that telelearning for example is most effective when the students are already highly motivated, highly skilled and practised in learning and thoroughly understand key concepts in the subject area.

Developing and using interactive technology is a complex issue. However, if the quality of interactions between student and teachers will, as the literature suggests, dramatically improve through the selective use of interactive technology, rural communities and the school community cannot afford not to invest in itsdevelopment.

2.05 Characteristics of teaching and learning unique to distance education

(a) Dominance of print materials

The dominance of print materials materials noted by (Kaye 1998) causes problems for students who have difficulty accessing information from the text. Different learning styles, levels of ability to get meaning from the text and speed with which a student reads, will impact on outcomes for the student.

In an investigation into how tertiary-level distance students use and learn from textual material during actual study sessions, Marland, Patching, I & R Putt (1991) raised issues that point to the complexity of this problem and the necessity for teachers and others concerned for teaching and learning in distance education to find out more about the difficulties students can have. They reported a variety of problems that could impact on students having difficulty accessing information from text. These ranged from poor metacognitive skills to deficiencies in orientations, approaches and styles.

Senior courses rely heavily on print for delivery. Syllabus requirements such as 220 hours of study in courses make this necessary. The sheer volume in itself can often result in inappropriate time management and a survival mentality that can result in a superficial approach to learning.

Interactions between teacher and student are crucial in helping students. It is in the best interests of the School and the rural community, that teachers have the resources, knowledge and skills to make these interactions effective. It is also necessary if equal opportunity of access to appropriate teaching and learning is to be a reality for students in rural communities.

b) *separation of teacher from the development and production of course materials*

Producing teaching and learning materials for isolated learners at the Brisbane School of Distance Education has become a specialised task. Dwyer (1991) reinforces this by pointing out that the way the instructional environment is manipulated will impact (positively or negatively) on the level at which learners process information. (Moore, Thompson and Dirr 1991:24).

The design and presentation of the learning materials can increase for the students, the interest, motivation and ease of interaction for students. This can open the door for effective interactions. However, the students responses must be reinforced, evaluated and challenged through interactions with their teacher. This is a critical factor in how effective interactions with materials are.

The separation of teacher from development of the course does present a challenge as Burge, Howard and Ironside (1991) noted. The challenge is how to mediate the learning effectively so as to optimise the potential for teaching and learning. The issue Beaudown (1990) raises is how can rural and school communities ensure teachers have the conditions and motivation necessary to mediate well. Beaudown stresses the need to define the teacher as a proactive mediator between the program materials and the learner. He notes that there is no place for teachers to be only information givers or dispensers of knowledge (Burge, Howard, Ironside 1991:5).

Billings (1991) in her review of literature has alerted how important the need is to consider the social factors of learning when she found that the sociological variables appeared to significantly influence learning outcomes in distance education. Sociological variables refer to a preference for having others present in the learning environment and also for pacing and structure. Physical variables, environmental variables, psychological or affective variables apparently have little effect on learning outcomes (Moore, Thompson and Dirr 1991:23).

(c) *Independent learners*

Because there is a reliance on print materials and because of the volume to be read, students have to spend a considerable amount of their time independently interacting with the information provided in the text. Much of this time for students enrolled in the senior school will be alone, independent of the teacher and the home supervisor.

Independent study according to Dressel and Thompson (1973) can be defined as *the student's self-directed pursuit of academic competence in as autonomous manner as he is able to exercise at any particular time (Cline 1990:10).*

This ability to study independently is not developed without motivation, self confidence, self esteem and the ability to manage time effectively. Teachers send out workrate calendars which set out clear timelines and structure the days. However, unless the student has the capacity to respond to this and be able to work independently, learning though the Brisbane School of Distance Education will be difficult. The student and teacher interactions often need to be structured so that the necessary skills and attitudes for independent learning can be facilitated.

Stone (1992) in his research on distance education students pointed out that learners come to learning programs with different and individual needs. His research indicated that learners with external loci of control, need more regular contact and interaction with their teachers.

His findings indicated that telephone contact for some students was the most effective way in which to conduct interactions.

Families of students who lack the ability to work independently have a crucial role to play in supporting, encouraging and strengthening the links with the teacher. Without encouragement students who are not autonomous will not survive. Student and teacher interactions will be much more effective in education if they are valued and reinforced by both the communities they represent.

(d) *Interactive learning and teaching*

The physical separation of the teacher from student and student from student, for the majority of study time means that verbal interactions such as class discussions, debates or other group interactive learning are missing. Dillon, Gunawardena and 14

Parker (1992:13) suggest that the higher level thinking skills of synthesis, analysis and problem solving are often developed through these more interactive strategies. Therefore, the teacher and student interactions in the distance mode will have to consciously cater for higher level thinking skills in other ways. Other opportunities will have to be provided so that students can test their understanding against another student's or teacher's ideas.

Learners learning through distance education, like mainstream classroom learners, require

> cognitive and affective feedback from peers and teachers (the reactive dimension), and opportunities for discussing what they currently understand or are puzzling out themselves (the proactive dimension in learning) (Burge, Howard, Ironside 1992:6).

Teacher and student interactions need to occur sometimes in face-to-face situations. Rural communities and teachers need to collaborate to find venues and resources to ensure that this occurs.

(e) *Networking across the regions and using local resources*

Because students studying through Distance Education in the Senior School do not have immediate and sometimes ready access to resources such as Guidance Officers, examination rooms, and library services, students are likely to use resources if they are available, in their local community. An example of such networking is the requirement for internal assessment, where students must establish a link with an appropriately credentialled person to supervise their examinations.

Such links in the community give relevance, meaning and a holistic approach to education. Networking strategies need to be consciously planned and implemented.

2.06 Efficient support systems.

Interactions in the Brisbane School of Distance Education, like other open learning institutions depend heavily on having an efficient support system. Without such support systems for recording, despatching, publishing and accessing information, storage of student records and other information, barriers are erected preventing quality student and teacher interactions. This support system is yet another important link in the search for and practice of quality interactions between teacher and student.

At the Brisbane School of Distance Education there is, as there is in other open learning institutions, a large drop out of students from distance education. The attrition rate is over 50%. The investigations of Peters (1992) and Garland (1993) signal that this is a very complex issue. However, it must surely be the responsibility of the rural and school community to ensure that distance education is resourced so that if and when students access it, it has the capacity to provide quality education that meets the needs of the students enrolled.

The purpose of this paper is to indicate that (through teacher and student interacations) there are already existing valuable links with rural communities. These links need support and facilitation so that they can be improved. The student and teacher interactions are a vital focal point in this unique form of education and are a shared responsibility of two communities, literally kilometres apart.

METHODOLOGY

The purpose of this pilot study is to investigate the nature, frequency and purpose of the interactions between students and teachers at the Brisbane School of Distance Education. Exploratory quantitative research identified the frequency, the purposes and the type of interaction that were occurring between the teacher and the student. It was also used to discover whether or not these interactions were initiated by the teacher and whether the interactions were considered a valued part of the teaching and learning process.

Data has been collected from:

- documents published within the school
- questionnaires
- observations

Documents analysis:

The documents analysed provided data published in the school on enrolments.

Observations

Observations were made as a participant of the teaching and learning processes of distance education.

Questionnaire

The questionnaire was designed to identify frequency and type of interaction. A copy of the questionnaire is included as appendix A. As the reader will note it is rather simple and direct. In fact upon its return it became apparent that not all the information it generated could be used. The construction of some questions and the difficulty in coding the replies led to only some data being analysed. However in the development of research (particularly when it centres around an unknown subject) pilot questionnaires are quite often the precursors to more systematic and higher yielding forms. For instance the next questionnaire would be designed to test more defined concepts and in some instances propositions which came to light in the pilot questionnaire.

Nonetheless this questionnaire was only intended to start dialogue between school and student and indicate some information about that relationship for rural communities.

A copy of the questionnaire was issued to the entire population of full-time senior students and a random selection of part - time students. In total 161 full - time students and 63 part -time students. At the time of writing almost 45% of questionnaires had been returned. From these a sub sample was taken (simple random). Finally 15 questions each were selected coded and tabled from 45 questionnaires.

4.00 FINDINGS

Set below are the row totals for the questionnaires on distance education and student contact along with the code explanation for each.

CODES FOR DISTANCE EDUCATION

QUESTION 1

D = distance A = approved M = medical H = home R = re-entry

S = school-based O = other

QUESTION 2

Y = yes N = no

QUESTION 3

Y = yes N = no

QUESTION 4

F = family P = peers O = other N = no discussion

QUESTIONS

Y=yesN=no

QUESTION 7

N = never S = seldom O = occasionally Fr = frequently

QUESTION 8

Y = yes N = no

QUESTION 9

Y = yes N = no

QUESTION 10

Y = yes N = no

QUESTION 11

N = never S = seldom O = occasionally Fr = frequently

STUDENT CONTACT

ROW TOTALS AND COMMENTS

Q1 N=45 MODEd=14 h=10 a=8 m=8 r=3s=1 0=1

The modal category was distance (those students who were enrolled due to isolation from a school with buildings) These were by large, country based students.

Q2N=45 Moden=38 y=7

This question defined a rural community as living in a community of less than 1000 people - of which only 7 did. However when it was considered that the modal category for enrolment is distance, the definition of a rural community being less than 1000 (ABS definition) was not useful and this question became redundant.

Q3 N = 45 Mode y = 38 n = 6 Missing values = 1

Only six students did not discuss their education with anyone. This indicates that not only the student but those who are in social contact with the student have some awareness of the school of distance education.

Q4 N = 45 Mode f = 32 0 = 4 p = 3 n = 2 Missing values = 4

The majority of students discussed their education with family indicating that the family also interacted (albeit indirectly) with the school.

Q5 N = 45 Mode y = 43 n = 2

Students do initiate some contact with their teachers.

Q7N=45 Modeo=24 s=12fr=2n=1 Missingvalues=6

Occasional contact (more than once a month) is the modal category. The fact that 12 students seldom (once a month or less) contact their teachers is a concern and does not indicate a community that networks regularly or strongly.

Q8 N = 45 Mode y = 40 n = 5

40 students were contacted by their teacher. Disappointingly a total of five students claimed to have not been contacted by the school. This indicates that communication problems (be they structural or personal) exist within the school.

Q9 N = 45 Mode y = 43 n = 2

43 students indicated that their teachers were helpful in giving assistance. However the level of this assistance really needs to be measured so that the nature and quality of teacher assistance can be scrutinised.

QI0N=45Modey=45

Q11 N =45 Modes= 17 n = 12o=6fr=2 Missingvalues=8

29 students seldom or never used the library or resource centre. This is disappointing but confirms findings in the literature discussing the difficulty of accessing information when there is such a large volume of print. It could also indicate a particular style of teaching which does not require individual research and self initiated learning. This question needs be reformed to give more specific information that relates to the teaching and learning.

DISTANCE EDUCATION

CODES

QI Numerical values

Q4 p = telephone w = written correspondence m = modem/ computer np = no preference o = other

Q5 fl = flexibility i = isolation tr = teacher relationship hs = home study o = other

Q6 i = isolation tr = teacher relationship a = asssesment o = other

Q7 Y = yes N = no

DISTANCE EDUCATION

ROW TOTALS AND COMMENTS

Q1 N=45 Mode0= 171 = 13 2=9 3=3 4=2

17 students had yet to take part in activities and thirteen had taken part in only one activity. The School puts a lot of its resources into extension services. This question needs to be followed up to see why this is so.

Q4 N 45 Modep=25w= 12 np= 1 m = 1 0=1 Missing values=5

The most popular form of communication was by telephone. This finding supports the investment made by the school when each teacher was given a personal telephone extension in 1993. The literature review also supports the popularity of this technology.

Q5 N 45 Modefl = 17hs=7 o=6tr=5 i=2 Missingvalues=8 Flexibility in study arrangements was the most endearing feature of distance education to its students followed by the choice of being able to study from home.

Q6 N=45 Modeo=5tr=8 a=7 i=6 Missing values 16

The modal category for this question is really that of missing values. One might infer that students did not want to criticise openly. Other than that teacher relationship assessment and isolation were the other main areas of contention.

Q7 N = 45 Mode y = 44 N = 1

44 students had previously studied at a school with buildings.

Q8 d = 44 o = 1

5.00 RECOMMENDATIONS

The findings of this pilot study give evidence that interactions are occurring on a regular basis between teachers and students. It shows that teachers and students value these. However, it also shows that the initiation and control of these interactions is mainly hands of the teachers. This is of concern in light of the literature review on distance education which supports the view that teaching and learning should provide opportunities for transactional learning. The delivery of teaching and learning needs to facilitate active participation so that students actively participate in the teaching and learning processes. The responsibility to ensure this occurs must be a shared one between the rural and school communities so that the quality of education is such that the educational outcomes are successful and supportive ofthetwo linked communities. The findings indicate that the majority of students discuss their school work with family or peers. This offers a passage way for community involvement.

The findings indicate that the families of students in the rural community value and support interactions. It is important that this support is developed. It is recommended that the rural community and other communities accessing distance education, become involved in developing the necessary resources and processes so that appropriate two way interactions are guaranteed. It is recommended that rural communities accept and act on, in collaboration with the School community, the responsibility for ensuring that student and teacher interactions reflect the quality education in distance education.

This pilot study has shown that interactions are occurring. Evidence has been extracted on the purpose, frequency and relationships of these.

It is hoped that this will make members of the rural community aware that students in their community are forming crucial links in education. These links need community

support.

It is recommended that further research be undertaken so that rural communities have a much greater understanding of what distance education offers and in what ways they can have a role in improving it.

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Appendix A

QUESTIONNAIRE 2

Distance Education

1. Do you take part in any of the following activities? (circle as many as you wish)

Camps
School Visits
Activity Days
Tutorials
Home Visits
Work Experience
Work at Australia Post

Others: ____________________

2. If you did take part in any of these activities, did you enjoy them?

(Yes or No) ____________________

3. If you answered yes, can you explain why? If you answered no, can you explain why not?

____

____

4. How do you prefer to communicate with us at the School of Distance Education?

____

Why? ____________________

5. What do you like best about studying with this school?

____

____

6. What don't you like about studying with this school?

____

____

7. Have you ever studied in a school with buildings? (Yes or No)

____

8. If you answered yes, which type of school did you prefer?

____

Why? ____________________

____

QUESTIONNAIRE 2

Distance Education

1. What is your student type? (please circle one)

Distance	Medical	Re-entry	School-based
Approved	Home	Other	

2. Do you live in a rural community (a town with less than 1000 people living in it)? (Yes or No)

____

3. Do you discuss your school work with anyone who is not your teacher? (Yes or No)

____

4. If you answered yes to Question 3, who do you discuss your school work with? (maybe your mother, father, fellow student, sister or brother)

____

5. Do you ever ring or write to your teachers? (Yes or No)

____

6. If you answered yes, why do you contact your teachers?

If you answered no, why don't you contact your teachers?

____

____

7. How often do you contact your teacher? __________

8. Does your teacher contact you? (Yes or No) __________

9. How do you feel about the contact you have with your teacher, does she/he help you with your school work?

____

____

10. Your teacher sometimes writes comments on your paper. Do you read these? (Yes or No)

____

11. How often do you contact the library or resource centre?

____

12. Why do you contact the library or resource centre?

____

THE DEVELOPMENT OF TELEMATICS IN A RURAL DISTRICT IN WESTERN AUSTRALIA

J. Bowden – Australia

ABSTRACT

The Telematics program in Western Australia was introduced in 1991, and was designed to cater for a range of learning styles, maximisation of choice, and the provision of successful curriculum experiences for isolated students. Through the auspices of this program, the use of appropriate technology to widen access to the curriculum has facilitated cross-sector collaboration in the effective application of teaching and learning in a distance education environment. The objective of this research was to investigate the use of the Telematics technology in the delivery of learning programs from one small rural district high school.

A case study approach was selected as the data would reflect individual experiences both at the delivery and the receiving schools. To establish a base from which to make judgments and assertions, a series of six key factors were elicited. These presented a number of aspects that contributed to a comprehensive picture regarding the development, implementation and ongoing maintenance of the Telematics program.

The study concluded that the sharing of such resources within a small cluster of schools, has enabled them to increase their flexibility in terms of curriculum choices, exploration and familiarisation of the computer based technology, encouragement and motivation for the staff to develop innovative practices, co-operation between the various schools in the network, retention of students in post-compulsory education and opportunities for girls to develop technological competencies.

BACKGROUND

There are a number of economic factors, both external and internal that are occurring simultaneously in Australia to force a re-examination of workforce and training needs. Public and private industries as well as government agencies are seeking to develop skilled and adaptable workers. The key trends within the education and training sectors have been therefore, to focus on improvements in organisational restructuring, improvements in student performance and improvements in workforce productivity.

The physical size and vastness of Western Australia, and the relatively small population with its concentration around the coast, creates some problems of economies of scale for the delivery of education and training to remote areas. Access and equity for all students, has in recent years formed part of the state educational agenda designed to meet the needs of a small number of Australians who, either by choice, or because of necessity must live in very isolated conditions.

During the 1990s, the growing level of interest in Western Australia in network technology (communications technology), which links classrooms, teachers and individual students to a range of external sources, has served to open up new avenues of distance learning. The use of technology has provided a means for accessing information for those students who are disadvantaged by such factors as geographical isolation. Smith, Fyffe & Lyons (1993), describe distance education as a "mutating virus, in that schools are now required to provide by electronic and other telecommunications devices, a range of courses for a widely scattered and increasingly diverse population of students. In the past few years, distance educators have been undertaking trials using communications in regional areas. The diversity of these initiatives has stimulated a resurgent interest in distance learning by state education systems, an interest that has been accompanied by some rapid developments in the technologies to support such programs.

The use of appropriate technology to widen access to the curriculum and to enable cross – sector collaboration in the effective application of teaching and learning is being applied to rural and remote schools and to the distance education environment in Western Australia. The introduction of Telematics has however resulted in a comprehensive project, with fifty schools participating in staff training and development programs for delivery of the curriculum to rural and remote schools.

There are approximately 91,000 non-metropolitan based students in Western Australia who attend rural schools or receive correspondence and/or radio delivered lessons. Until quite recently, supplementary tutorial support for distance learning had been restricted to the telephone and a few sporadic face to face visits. Over the past four years, schools in Western Australia, including the Distance Education Centre have been very proactive in introducing modern communication technologies to enhance their traditional classroom methods of instruction. The benefits have included greater learner control, more rapid response to the teaching and learning process and a clear focus on the strategies to support individualised learning. In addition these technologies can provide access to information services for research and inquiry from any remote location computer, modem and a telephone connection.

Telematics

Telematics (a generic term to encompass all electronic "real time" communications), is an audiographic system that is being used to provide an extended classroom by linking the teacher to between one to five school sites simultaneously.

In 1992, a group of schools in the Moora District in Western Australia formed a local schools network to trial the Telematics system and to share the available teaching expertise within the district. This has provided tangible benefits for students in terms of facilitating access to a broader range of curriculum areas such as Languages other than English (LOTE). For the past eighteen months all schools in the network have participated in a collaborative program to trial the use of the Telematics equipment for curriculum delivery as well as for professional development purposes. Aspects of this program have subsequently been taken up by other districts/projects throughout Western Australia.

The use of telematics involves the sharing of resources within a cluster of rural schools, and has the potential to increase their economic viability and to create a positive image of the school within their local community. Other benefits to schools choosing to explore the technology, include increased curriculum choice, exploration and familiarisation with computer technology, encouragement and motivation for the staff to develop innovative practices, cooperation between schools, retention of students in post-compulsory education and opportunities for girls to develop technological competencies.

With the implementation of the Telematics program in Western Australia, there have been some clearly identifiable problems. The lack of funding both for the establishment of the equipment and for the recurrent costs associated with a program that has its grass roots embedded in a local school setting is a major impediment to its success. Likewise the need for staff training, technological and curriculum support, and a commitment towards developing and improving instructional design skills for teachers has had an impact on the growth of such systems. Inherent in planning local school networks, there is the additional factor associated with the collaborative nature of the program, as administrators by necessity have to reach consensus regarding the timetabling aspects across the network, to facilitate the simultaneous delivery of the curriculum.

OBJECTIVE OF THE CASE STUDY

To investigate the use of Telematics technology in the delivery of learning programs from Wyalkatchem District High School from the perspective of the educator participants.

METHODOLOGY

Background to the Study

As the Telematics programs that are operating in schools at present have not yet been fully developed, and the Education Department of Western Australia is seeking refinements to the proposed implementation of the technologies on a widespread basis, it seemed appropriate that a case study approach be adopted to investigate the Telematics program as it operates at one District High School and its receiver schools. The Moora District was one of the earliest districts to embark upon the use of communications technologies in 1991 when the District Superintendent proposed the installation of an audiographic system to meet the growing demands for enhancing the curriculum. Despite a difficult introduction through what was perceived as a 'top- down' model, Wyalkatchem District High School assumed the leading role in the district.

Research Methods

The case study approach seemed to be the most appropriate research model which would give rise to the collection of rich data based on individual experiences both at the delivery and the receiving sites. To establish a base from which to make judgments and assertions, a series of six key factors were elicited. Each of the key factors contained a number of aspects that could provide a comprehensive picture regarding the development, implementation and ongoing maintenance of the Telematics program. The key factors were as follows:

- Accessibility
- Ease of Use
- Reliability
- Functional Application
- Organisation
- Lesson Delivery

Three types of data sources were used as shown in the table below.

TABLE OF DATA SOURCES

DATA SOURCE	PERSONNEL	NO	POSITION IN SCHOOL
Interviews	Administrators	2	Principal
	Teachers	4	Deputy Principal
	Program Co-ordinators	4	Teachers
Observation	Teachers	3	Upper School
			Lower School

Biographical/ Historical Data	Administrators	1	Principals
	Teachers	1	Teachers
	Others	3	Support Staff

RESULTS AND INTERPRETATION

The data collected was grouped into issues and patterns of events, and a number of trends and attitudes analysed.

From this data a number of assertions were made.

Assertion 1

> *Telematics can be used for all subjects and by any teacher regardless of background experience in computers and level of technological confidence.*

Classes in Human Biology, English and Mathematics (Upper school) were taught by three different teachers at Wyalkatchem District High School and operate side by side with Italian classes being taught to students in Years 4-8 by the Home Economics teacher. During certain class periods, an upper school class is taught at the same time as the Italian class, in the same room using a different set of equipment.

Teacher Background

Staff at Wyalkatchem District High School were identified for their teaching expertise by the Principal and the Program Coordinator. None of them had any significant background in using computers, and none of them had any experience in using communications software or the Telematics program. As a direct result of teaching on the Telematics program, all teachers indicated that during the year, they felt that they had gained confidence in using the system for its designated purpose, and had developed strategies to overcome technical and pedagogical problems.

Assertion 2

> *The location of the Telematics equipment in a school, is critical to the success of the program.*

During 1992, the Telematics equipment was installed at Wyalkatchem District High School and at four receiving sites in the Moora District. Many of these schools experienced some difficulties with the initial decision as to where to locate the Telematics equipment.

Wyalkatchem District High School

At Wyalkatchem the placement of the system in the library by the Deputy Principal created some problems and resulted in a re-location and the purchase of a further set of equipment by the school in order to accommodate the growing demands within the district. In this regard the Deputy Principal had some background in computers and was technically competent in establishing the system within the school.

Due to the fixed nature of telephone connections, the relocation of the Telematics equipment at Wyalkatchem resulted in the designation of a special room for the Telematics equipment. This room was located in the middle of the school midway between the primary and secondary sections. Both sets of equipment were housed in this room and placed about ten feet apart so that each had access to the overhead projector. There were no sound panels separating the two sets of equipment and on several occasions both sets were used simultaneously. A timetable indicating the program for each subject was displayed prominently on the wall.

The Telematics room also housed a resource collection of books and other materials which were at various times collected by groups of students who needed them for mainstream classes.

Telematics Location at Receiving Sites

At the receiving sites, the equipment was located variously in the library, a special computer room off the library and even in the staff room. The majority of these schools were very small primary schools, and so well established that the incursion of additional space for the Telematics equipment posed a real problem. In the main the location was selected as it was the only available space although several schools indicated that priority was given for maximising the usage by students.

Locational Factors affecting the Success of Lessons

Observations of the lessons being conducted from the delivery school and subsequent interviews with staff, indicated that a number of factors resulting from the placement of the equipment impinged upon the successful delivery of the lessons. These consisted of:

1. Distractions

Students constantly experienced distractions during their lessons. This was a result of non synchronised bell times when the primary students emerged from their classes for recess and other out of class sessions. Other distractions occurred on a periodic basis when students were sent to collect resource materials for other classes being held else where in the school. These intrusions were tolerated even though they caused disruptions to the structure and flow of the lessons.

2. Availability of Equipment

There were a number of items that were integral to the Telematics equipment and which were frequently removed from the room by other teachers. For example, from observation, it was noted that the overhead projector was missing, which created the necessity for alternative teaching strategies to be employed by the teacher. The removal of such items by other teachers in the school was a constant source of aggravation for the delivery teachers.

The facsimile machines, which are used to support Telematics lesson deliveries, likewise have been the source of some frustration for all the participants. Lesson notes, homework tasks and work sheets are regularly faxed to and from students at the receiving sites. The facsimile machines, being also used for administrative purposes, were located in the office/administration area which is usually at some distance from the Telematics site. This has necessitated the coordinated distribution of such materials, many of which failed to materialise in time for the lessons. All teachers commented during interview, on the problems created by the lack of immediate access to this equipment.

3. The Time taken for Setting Up and Packing Away.

The supervisors of the primary students at the receiving end, found that the setting and packing up of the Telematics equipment was both time consuming and led to problems with making the required connections. As the Telematics equipment was variously located in each of the smaller schools rather than being set up in an established position, it took a minimum of ten minutes to relocate and set up the links in preparation for each Telematics lesson.

4. Staff Access to the Telematics Equipment

The demands for access to the Telematics equipment for preparation of lessons was seen only as a minor constraint. Most staff felt that there was sufficient in- school time for preparation (an additional allocation of 0.25 for the Telematics classes), and as some teachers used the screens more extensively than others there were few limitations. However one teacher who frequently used a range of visual and graphic screens, would have preferred to complete his preparations other than in school time if the Telematics equipment had been more portable.

5. Student Access to the Telematics Equipment

Students in the receiving primary schools had reasonable access to the equipment usually during their free times and at recess and lunch breaks. It was used by staff and students for a variety of purposes such as word processing, games and in some instances for communicating with other students in other schools.

Assertion 3

> *The Telematics equipment is 'user friendly', robust, easy to set up and maintain.*

Reasons for Choice of Equipment

The notion of a top down model was pre-eminent in decisions that determined the choice of telecommunications equipment. The District Superintendent in 1991, informed schools that they were to embark on a Telematics program in order to provide LOTE classes for their students. Funds were supplied through a Commonwealth Program and administered through the Central Office of the Ministry of Education. Hence decisions were related to system priorities and policies. Other factors that determined the choice of equipment were related to the need for compatibility and connectivity within the system. Consideration for the robustness of the equipment to withstand the extreme climatic conditions that are to be found in Western Australia also formed part of the selection criteria. Previous experiences in other states had showed that the Macintosh machines were capable of operating in all areas regardless of temperature, dust, humidity and other environmental variations. Cost was yet another factor that impinged upon the system's choice, with this type of equipment being relatively cost effective per node and capable of future upgrades or additions such as scanners and other accessories.

Maintenance of Telematics Equipment

There were a number of minor problems directly related to teaching experiences using the Telematics system and included such things as battery replacements, detached speaker wires and the long delays in the replacement of computer parts.

Assertion 4

> *As teachers become more familiar with the Telematics equipment, additional components become a requirement in order to increase the efficiency and quality of the delivery product.*

The Telematics program has been in operation at Wyalkatchem District High School for the past eleven months. During this time staff have become familiar with the equipment and its limitations. At a preliminary meeting and again during interview, most staff reiterated the need for additional funding and resources to further enhance the quality of the lesson deliveries. These were classified as physical resources (e.g. scanners, upgraded software and hardware), human resources (e.g. on-site coordination) and others (such as administrative negotiations for school and examination timetables).

Assertion 5

> *Technical and human issues, including the capacity to establish and maintain telephone and modem connectivity can be overcome with experience.*

Telematics programs rely heavily on the capacity of the system to establish and maintain good telephone connections. Initially technical problems have the potential to overcome any desire to persevere with the equipment, and if the modem and voice connections are constantly denigrated by the quality of the reception, it is unlikely that the system will succeed.

Technical Issues

Frustration with making the appropriate links both for the voice and modem connections has been a feature of the program in the Moora District. Teachers at the delivery sites cited their worst experiences as the infrequent hookups with the receiving schools, and in one case a 'whole week without any connections'. Even when the voice connection had been made, there were times when the level of interference on the line totally negated the outcomes of the lesson.

Other problems relating to the transmission of data were described as the time taken to load and to send the screens. Hands free phones and extension speakers also provided scope for criticism, as these were often unserviceable or working in a reduced capacity that mitigated against the clear reception of the lesson.

Human Issues

The teaching staff reported that the aspects that they found initially the hardest were the absence of body language or eye contact which made it difficult to gauge whether the subject matter was being understood. The maintenance of deadlines, and the requirements to fit within prescribed time frames were also difficulties that had to be overcome. Teachers found that their teaching skills were challenged and the ability to make a single cohesive class that performed in a setting that was socially not conducive to learning, exceptionally difficult. Upon reflecting on their early experiences, the same teachers could cite specific strategies that they had developed to overcome the potentially disastrous circumstances.

Solutions to the Emerging Problems

Communication was seen as the key to survival and the telecommunications medium was used for this purpose. The sharing of problems and seeking solutions has since become a feature of the Moora network. As a result the network is used regularly for these problem solving sessions. Students have also been taught to understand code signals should the network not be functioning efficiently and the teachers increased their availability by giving their home phone numbers to their students to assist with difficulties and any additional queries.

Many of these constraints have been progressively solved by the teachers who have arranged face to face visits and other exchanges for their students during the course of the program.

Assertion 6

> *The quality of the transmission is critical for Telematics and system level negotiations with the providers of the service are required to enable reliable and unimpeded links.*

Both the delivery and the receiving teachers had experienced poor quality reception of both the voice and the modem signal, and in some cases found that transmission was impossible. Investigation on behalf of the schools by the Ministry of Education, revealed that the local Telecom exchanges were inadequate for the designated purposes, namely that of transmitting voice and data at the same time. In some cases there were some initial problems with compatibility of the modems, but while some connections functioned adequately all of the time, others tended to drop out and in one school this was a frequent occurrence.

Telecom is the provider of the service and as such has a responsibility to deliver a reasonable reception. Despite discussions with the schools, little has been achieved in this area. It is therefore the responsibility of the system to arrange with the service provider for a more reliable link.

Assertion 7

> *Staff training programs, both initial and ongoing are essential for the effective implementation of Telematics, and should cover the development of technical competencies as well as methodologies and resources to support the program.*

The on site training for the delivering teachers was seen as experimentation and the technical mastery of the equipment through a trial and error approach. It was considered that there was no training given in the preparation of screens or teaching methodologies to equip beginning Telematics teachers.

The only form of training was considered to be on site training, but the delivery teachers commented that it had stimulated their thinking and had given them the necessary confidence to start with the preparation of screens. On the negative side however, it was seen that this training was not always applicable to the teacher's own subject area.

The staff delivering the Telematics programs had some clear ideas on the type of further training and the type of support that was needed. Additional training in the Macintosh environment, accessing and using the new version of the 'Electronic Classroom', instructional design techniques and related content ideas, public relations and dealing with new innovations from a school base were all deemed important. There were no comments as to where this training and support would originate from, only the desire to further enhance their skills in using the system.

Assertion 8

> *The introduction of a Telematics program into a district requires adjustments in terms of developing collaborative school networks based on negotiated and agreed administrative arrangements.*

The Moora District Network was established in 1992, and as a result of a basic and negotiated agreement between the principals of the participating schools. Since that time other issues have assumed pre-eminence and the success or otherwise of the network was seen by the staff to rest upon a demonstration by the schools' administration to maintenance of their commitment to the program.

The Principal stated that his role was to 'facilitate the project, plan for the acceptance of Telematics as a legitimate mode of delivery, and negotiate the organisational aspects of the district's program.'

The decision to commence teaching using the Telematics system in Moora required considerable negotiations between the participating school administrators in the preceding year. Wyalkatchem is one of the largest district high schools in the Moora district, and in order to meet the needs of the upper school students in the area, discussions with the District Superintendent resulted in the decision to link Wongan Hills with Wyalkatchem District High School. As interest in the program developed, other schools individually approached the Principal of Wyalkatchem to participate in the LOTE program.

Preliminary discussions included negotiations on the organisational structures, the matching of timetables, the identification of staff expertise within all schools in the network, an analysis of enrolment data and subsequent agreement for staffing allocations across the network, viable group sizes, communications mechanisms, resource sharing and the marketing of telematics programs to the school communities.

Identified Resource Problems

One teacher indicated that " there have been ongoing difficulties in the provision of adequate facilities in support of the teaching programs at the receiving site". This was perceived to be due to communication breakdown at the administration level.

Expectations for the Future Use of the Telematics Program

Based on the shortcomings identified earlier, all staff exhibited a reluctance to discuss the future of the program. The dependency on coordinated arrangements meant that their school would become less involved due to the inequitable provision and sharing of resources. The primary schools were eager to contribute and offered some suggestions as to the programs that would be appropriate, although they generally had few extra resources and hence required the support and access to expertise available in the larger district schools. Another teacher perceived the major shortcomings in the system to be the lack of administrative support from one of the receiving schools and that this would be likely to affect future opportunities for future sharing within the network .

Assertion 9

> *Once implemented, Telematics is seen by the school community as a viable method for providing access to and an extension of the curriculum.*

The proposed introduction of the Telematics program into the Moora District initially has had strong support from the teaching staff as well as commitment from those staff not teaching on the program and some minor reservations from the parents. Since its inception, the attitude has been more universally one of general acclaim from all groups. This has been monitored by the schools' principals who stated that their school communities were now totally behind the program especially as it 'responds to the rural inequity claims.'

Perceived Effectiveness of Teaching using the Telematics System

In general this was summed up by most staff who saw the program as a viable second choice, where face to face teaching was not available. In comparison with other distance education courses taught through the correspondence mode, the Telematics option ranked unanimously higher. In two cases, teachers considered that students outcomes would be improved through the Telematics course delivery, especially in such areas as LOTE. Another teacher commented that the learning of a concept was often slower, but the teaching of a syllabus that was factual and graphics based could be effectively guaranteed. However in the main, teachers felt that 'real time' delivery of instruction was preferable, but given the increased motivation of the students, the available teaching expertise and the commitment experienced by all stakeholders, Telematics could provide a valid option.

Opportunities Afforded by Telematics

Access to the program was highly valued as it provided opportunities for widened subject choices. The number of student participants increased once the program was underway, and one teacher stated that 'other students had joined the Telematics class after the first week, and again in the second semester after hearing good reports from other students and parents.'

At the primary schools, the program was identified as providing opportunities for students to start a language program that would then be continued into the high school. Parents themselves have 'sat in' on classes thus providing information to the rest of the community. This has led to the development of a positive image and a high profile for the program in Moora.

The potential for using the system for adult learning has yet to be explored, and the enabling of course offerings either as part of the normal school curriculum or in the form of discrete courses offered in alternative times is a distinct reality in the future.

Parental Support

The introduction of the Telematics program was not entirely smooth and some early negative feedback was experienced by the staff at Wongan Hills. It was discovered however that these comments were based on a series of misconceptions that were later dispelled. Such myths are prevalent in other innovative programs, and issues such as fears of excessive costs, fears that students would be missing out on real teaching and even that Telematics would be just a 'flash in the pan' were part of the early reactions.

Other later documentary evidence supported the claims as to the value of the program. The impact of the Telematics program was such that parents lobbied hard to persuade the Minister and the Ministry of Education to continue the program in 1994 as there was a firm commitment to the perceived values of the program and a sense that the program was to be disbanded.

Assertion 10

> *Users of Telematics have acquired incidental skills with considerable benefits for teaching and learning.*

One of the unintended outcomes of the Telematics program has been the development of other types of skills that are seen as beneficial for both the teachers and the students.

Teaching Skills

The teaching staff, identified a number of extraneous skills that had been acquired as a direct result of the Telematics program. Overall planning skills, including the setting of clear objectives for students, instructional design techniques, alternative teaching methodologies and the creation of new resources were all attributed to the Telematics teaching and learning. The more specific skill development included such areas as oral communication skills, questioning techniques, problem solving skills and the implementation of multiple learning strategies.

Students Skills

One of the stated objectives of the Moora District Telematics Program was to 'develop enhanced independent learning by students, assisted by teachers in a face to face teaching/facilitator/resource role'. All teachers considered that the acquisition of independent learning skills was evident, with greater initiative being shown by the students in establishing out of class contact by phone and fax. As one teacher quoted ' Due to the communications workshop and the nature of the Telematics classes, Wongan students have become effective, independent learners. This is evident by the way the students are communicating with their Telematics teachers ... and have approached their study and homework timetable'.

Other skills that have been incidentally acquired as a result of the program were cited as listening skills, general awareness and interpolation skills. The Mathematics teacher stated that the students' organisational skills had developed to a very advanced level as demonstrated by 'the maintenance of files in order, the organisation of special science equipment for lessons and the photocopying of faxed worksheets'. One staff member highlighted the perceived development of language skills in specific areas such as mathematics where the students at the receiving end found it necessary to use appropriate mathematical language to communicate. Another teacher further commented on the noticeable improvement in the articulation and verbalisation skills of the students, and another on the effects of the emerging cohesiveness that was evident in the group tasks where the students worked cooperatively to complete the set tasks.

Assertion 11

In addressing performance outcomes, consideration for the social and psychological needs of the students should also be given high priority.

Despite some initial problems with cohesion, the Telematics teachers have now found that the strategies that were employed to deal with these earlier problems have been effective. In the main the problems related to the psychological adjustments needed by the students, particularly those at the receiving sites.

Source of Problems

1. The perceptions of the students regarding their status in the class and the amount of teacher time that they were receiving mitigated against successful lesson deliveries. One of the teachers experienced some problems in the early stages of the program and suggested a 'them and us' syndrome had been a critical issue for the receiving students . The students at Wongan Hills felt that they were being disadvantaged and neglected by their remote teacher, and that this was reflected in their lower than usual grades.
2. The apparent lack of communication between the two schools resulted in some difficulties for the students and their teachers. As the delivery teacher commented 'we need to be told immediately if there are problems (real or perceived) so that we are not shooting in the dark. We also need frequent feedback on how the students are working and their attitude to the course'.
3. The lack of trust appeared to be an inherent factor in the communications process. The unavailability of body language cues that assist in conveying the more subtle teaching and learning messages, the difficulties experienced in communicating using this particular technology, and the frontier mentality of the participants all contributed to feelings of neglect and concern as to the viability of the medium.
4. Individual students on the receiving sites could dominate the lesson. The classroom dynamics were such that in the early stages the more assertive students were receiving a disproportionate amount of the questions and answers. This was not realised by the teachers until a clear signal was given from a parent who wanted a more equitable approach.

Responses to the Issues

In responding to these problems, the teachers at Wyalkatchem District High School implemented a range of strategies that enabled them to develop relationships of mutual trust. The counselling of students on all sites as to the nature and style of Telematics classes, the inclusion of early face to face visits and the provision of training for the students in both groups were among the recommendations made by the teachers for improving communications. Other strategies included the organisation of a communications workshop, ongoing excursions, school visits and the use of out of hours contact numbers.

The area of social and psychological needs was no intentionally overlooked by the teachers. The attempts to master the technology and to prepare adequately for this form of delivery simply took precedence over other less obvious issues.

One of the teachers felt that 'Telematics has altered the normal classroom dynamics, especially with regard to teacher/student relations. The students at the delivering site have been more sympathetic and receptive to the teachers point of view, and at times quite critical of the students at the receiving end'. This is indicative of the problems that place pressure on a system that has to learn to consider multiple points of view and to develop strategies to overcome the adverse perceptions.

Assertion 12

Telematics teaching requires a discrete methodology that complements normal mainstream teaching and learning.

Classes that are delivered by telematic means, require in addition to the normal classroom practices, a discrete instructional methodology that is inherent in the style of the delivery medium.

Setting Objectives

The historical data in supporting the introduction of the Telematics program in Moora, revealed the following objectives for the program that were developed by the teachers:

1. To provide access to cost-effective teaching of post-compulsory courses while students remain in their familiar environment through resource (personnel time/facilities) sharing.
2. Encourage continuation to post-compulsory studies through providing classroom access to a broader spectrum of subjects.
3. Develop enhanced independent learning by students, assisted by teachers in a face-to- face teaching/facilitator/ resource role.

In addition the Year 11 English teacher added a specific objective relative which was 'To adapt the Year 11 TEE English program to a Telematics delivery within the context of the course requirements'. None of the other delivery teachers, in their report on the Telematics Program (Moora District, Telematics Review 1993), included a specific set of objectives. In the main the adaptation of curriculum materials was implicit in the discussions regarding the following aspects of the Telematics delivery.

Lesson Preparation

Each lesson was governed the determination of the lesson content, the setting of specific objectives and the intended methods for presentation. The preparation of screens often included graphics, text or freehand drawings (diagrams) even though not all of these were used during the lessons. The preparation also extended to the transmission of the prepared graphics and notes via the facsimile to the receiving schools, usually at least two days in advance of the actual lesson. This routine is common practice amongst all the delivery teachers, who through experience have adjusted their schedules to enable time for the coordination, delivery and photocopying of the students' worksheets and other lesson materials.

Preparation time for Telematics lessons varied according to the subject area and the preparations also included the faxing of materials to the receiving schools. In comparison with the preparation time needed for normal face to face teaching, it was generally considered that the preparations for Telematics classes took far longer.

However as one teacher stated, 'It is double the normal preparation time ... but this is because more time is needed initially. This will become less as the screens are saved for future use'.

Lesson Sequencing

In the main, the general sequencing of lessons was planned on a flexible basis to allow for alternative strategies to cope with the instability of the transmission link. The Italian teacher stated that she always plotted the lesson sequence and ' started the lessons with questions related to past work'. Another teacher stated that she rarely loaded text beforehand and that homework was given out by typing a message on the screen at the end of the lesson.

It appears that the communication medium is best suited to using auditory techniques, and as such questions are planned into the lesson sequence and used until such time as the teacher is satisfied that the students have demonstrated that they have internalised the concepts.

The Use of a Variety of Technological Tools

Individual choice and the subject content were the prime determinants of the choice of technological tools. For example the Human Biology teacher used many prepared graphic screens with scanned images, and some freehand diagrams to illustrate his teaching points.

Others teachers made limited use of the screens, preferring to use faxed materials and questions. One teacher claimed that 'it is not always necessary to use the computer screen ... especially if you look on it as the blackboard'. This was particularly true of the Lote classes where the teleconferencing medium using voice alone was considered adequate for the purposes of the lesson.

The mathematics teacher commented that the tools and the software available for teaching upper secondary mathematics were not always suitable, and that other techniques had been employed. 'Writing indices, subscripts and other symbols can be very time consuming in mathematics. Eventually a code system was developed and used (e.g. today a * will mean to the power of two)'.

Teaching Techniques

All teachers made use of questioning techniques, with usually up to about 50% of the lesson being spent on discussion and other oral forms of communication. This took the form of rapid fire question and answer sessions at the start of the lesson, ongoing dialogue in the development of the lesson and further questions at the conclusion of the lesson.

All the delivery teachers commented on the types of questions used for Telematics delivery, which have to be framed carefully in the absence of body language to ascertain the level of the student's comprehension. During the lesson observations, these teachers demonstrated that they frequently used a technique of directing questions to specific individuals. This enabled them to keep records of their responses to ensure that everyone contributed. Individual conversations (via phone not conference hookup) provided all students with close teacher contact – probably more than would happen in a normal classroom.

Good questioning techniques were universally seen as essential with both open ended questions as well as low level short answers being considered appropriate according to circumstance.

Other strategies that the teachers have used, consisted of responding to auditory cues, developing strategies to elicit responses from the students, learning to adjust to slower than normal responses and having a flexible approach to the delivery of the lesson. One teacher also noted that having the Telematics system available, has enabled the modelling of ideal answers as espoused in the developmental language continua.

Classroom Management Skills

All teachers contacted suggested that there were no real disciplinary problems associated with teaching and learning in a distance education setting. The few problems that had arisen, such as a dominant student on the receiving site were handled by the Telematics teacher on a one to one basis by shutting off the conference phone or with assistance from the supervisor/coordinator at the receiving end. In other cases parents were contacted to ensure their cooperation in the return of homework and assignments. As one teacher commented 'discipline seems to be self imposed'.

Assessment and Reporting

There were no difficulties reported in association with the procedures for assessment and reporting. Students were assessed in several ways including classroom activities, oral participation, assignments (posted/faxed), and tests and examinations given at both sites with an open line for any questions. The only problem that had arisen, was regarding the administrative coordination of the examination timetable for both schools involved in the post-compulsory area.

Reports were issued by the Telematics teachers and sent directly to the various receiving schools who included them in their normal reporting process.

SUMMARY, IMPLICATIONS AND CONCLUSIONS

In general, the experience has shown most teachers that Telematics is a viable method for delivering the curriculum in most content areas. It has provided access to an extended range of subjects for students who are often penalised by the barriers of distance, and a challenge for teachers who are prepared to take on such an innovation even though their own background experiences with computers has been limited.

However, once the initial mastery of a new innovation such as Telematics reached a certain level, the need for further experimentation to produce even better results was universal. Staff now moving into their second year of using this medium, exhibited all the classic signs of wanting to improve the efficiency and the quality of the lessons that they were delivering. This can only be done by upgrading their existing facilities and equipment and the provision of adequate supervisory mechanisms at the receiving sites.

The location of the Telematics equipment in a school is quite significant, and the choice of the location reflected the type and size of the school. At Wyalkatchem, the Telematics equipment was located in a separate room which was used at least part of the time for this purpose. The smaller schools had problems that related to the need to mobilise their equipment for the Telematics lessons, and time was needed to set up and to return the equipment. At the delivery site there was a general lack of awareness by other staff who 'borrowed' essential items that detracted from the full impact of the lesson. Unwanted distractions were also a problem for students and teachers who operated in less than perfect conditions. All of these schools were built for normal/mainstream teaching purposes and the introduction of Telematics has been accommodated to a limited degree, but there still remains some attendant problems.

Despite the seemingly enforced introduction of the Telematics program, it appears that the installation and maintenance of the equipment has not created serious problems. In the main the equipment is sound and was considered appropriate for the delivery of education to distance locations. Of the few problems that have arisen, these have been rectified easily and have not required system level intervention. Staff and students have found the platform easy to use with few difficulties in the setting up either for the delivery or receiving of Telematics lessons.

There are a great many things that can inhibit the effective electronic delivery of instruction. Frustration was experienced by the pioneers of this Telematics program, but the resolution of the technical and the human issues has been seen as a challenge by the teaching staff. In the course of the year, they have adopted a number of measures to overcome such difficulties and have been largely successful in using the same medium for this purpose.

The staff at all schools felt relatively powerless in the face of faulty transmission. The Telematics system requires a guaranteed link, free of interference and the responsibility for this rests with Telecom and their capacity to service country areas. Negotiations at the local level have not resulted in any significant changes, and it is therefore incumbent on the system to arrange for a more reliable link from the service provider.

The training programs for the Wyalkatchem network appear to have been somewhat ad hoc in their approach. Support from the system, the district office and particularly from the school has been forthcoming, but the needs of the teachers for ongoing training have yet to be met in any consistent way. The initial approach has concentrated on the technical aspects of the training, and any professional development in the area of teaching methodologies has yet to be included as part of the total support for the Telematics program.

The need for collaboration across the teaching network cannot be under-estimated. This is the function and role of the school administrators. In Moora early efforts resulted in the establishment of an effective network which has been somewhat eroded by the unequal commitment on the part of the school administrators despite the best intentions by all staff concerned. The reliance on funding and special grants is not conducive to the longevity of such a project, and alternative sources must be sought with strong local endorsement and support.

Despite some initial opposition, the Telematics program was well received in the Moora District. The effectiveness of the teaching program is ranked highly and above the correspondence mode, but still seen to be less effective that normal face to face teaching. Community support and approval was monitored by the principals and the implementation of the Telematics program seen as a valuable tool in reducing some of the perceived inequities of rural education.

There was evidence from the teaching staff reflecting on their own skill development, and on the significant and observable changes demonstrated by their students, that the Telematics program has had a beneficial effect in other areas. The capacity to work independently was seen as an outstanding feature of the Telematics program, and was supplemented by a range of other skills that were directly attributed to the use of the Telematics system.

The psychological and social issues initially created some areas of concern. In recognising these problems, the teachers developed a series of successful strategies that could well be emulated elsewhere. They included opportunities for regular face to face contact which was valued by both the deliverers and receivers of education.

Telematics has created some changes for teachers in terms of the requirement for different methodologies for the delivery of lessons to students linked through distance learning programs. The setting of clear objectives, extended lesson preparations, and the type and style of presentations required different approaches that were suited to an electronic format. All of the teachers relied heavily on good questioning techniques with additional interest being generated through the presentation of screens designed to assist in the development of concepts. Discipline was not seen as a barrier to this form of learning, and the students were sufficiently motivated to eliminate any serious concerns. Assessment and reporting techniques were in the main based on the normal methods for assessing student performance.

It was found that overall the program was very successful in providing access for students who resided in rural areas in Western Australia. However this study has raised some serious concerns about the future of the Telematics program in a district such as Moora. The two most important issues revolve around the support for the staff which is a reflection of the commitment by the Ministry of Education and the provision of a better and more reliable service through Telecom. All participants in the program have appreciated the benefits that a program of this nature can bring to a rural area, and these benefits are perceived to outweigh the negative perceptions that have in the past been associated with the introduction of technology to schools throughout Australia.

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A COMMUNITY INTEGRATIVE FUNCTION IN AN EXPERIMENTAL RURAL PRESCHOOL

P.R. de Lacey, S.L. Walker and A.R. Barlow – Australia

ABSTRACT

The purposes and functions of a rural, experimental preschool(Project Enrichment of Childhood) are described, as the Projectnears the end of its first 25 years. The purposes include aneducational program, teaching healthy living, exemplifyingappropriate diets, providing opportunity for constructiveinteraction between sections of the community, offering entry tocareer paths for some local adults, and commencing the process ofproviding lifestyle choices for clients; as well as sharing resources with other community groups. Some descriptive andquantitative data are presented, showing some success in attainingthe aims of the Project. Some controversial issues in the philosophy of the project are raised. It is argued that themodel provided by this broad-based preschool is externally valid in terms of some other rural communities, since the emphasison enrichment education is designed to provide an integrationof educational, health, dietary and community-developmentobjectives.

INTRODUCTION

Within the highly urbanized society that is Australia, someof the special problems of rural living were recognized in 1968by a group of medical and other academics in their establishingthe Arid Zone Project (Nurcombe, 1976), a study of remote rural life. Concerned to extend their work beyond just an elaboratesurvey, some of the authors of the Project engaged a socialpsychologist named Ross to spend several weeks in Bourke, NSW,the focus of the project, to enquire of both non-Aboriginal andAboriginal sections of the community what contribution theywould like to enhance the education of their children. Bothgroups decided they wanted assistance with a preschool, thatshould be equally available for Aboriginal and white children.

Two members of the Arid Zone team, Nurcombe, a pediatrician-psychiatrist, and Moffitt, a clinical psychologist, had beenimpressed by the commencement of Headstart in the United Statesfour years earlier, and they established a preschool on a trialbasis in October, 1968, with two trained teachers and a houseconverted by the Bourke Shire Council for the purpose. An initialsurvey had showed the average score on verbal and other cognitivetests to be well below Australian and U.S. norms. The firstfull year, 1969, was spent in an experiment to see whether a structured teaching program, as advised by two American educator-psychologists, Bereiter and Engelmann (1966), or a traditionalpreschool program, was more likely to raise the low scores. Theresult was unequivocal: the structured program was substantiallymore effective (Moffitt, Nurcombe, Passmore & McNeilly, 1971). A concern that the structured nature of the program mightinhibit the development of creativity among the children wasallayed by a formal study of the question (Taylor, de Lacey &Nurcombe, 1974).

A PHILOSOPHY OF EARLY EDUCATION

A philosophy of education generally addresses questions concerning the aims of education and the means by which theaims might be realized (Reid, 1962). Brubacher (1962) identified some major schools of philosophy which mightcontribute to providing answers to these two crucial questions. Since the inception of the Bourke preschool, there can berecognized in statements concerning its philosphy (Nurcombe,1976, de Lacey, 1976) two of these schools predominating essentialism and progressivism. Essentialism suggests that there is an accumulation of wisdom dating from ancient writings which can be regarded as essential to adequate functioning in a modern society, in terms of maximizing both personal development andaccess to the better opportunities available. Progressivism,which owes much to the philosophy of John Dewey and to thetraditional philosophy of pragmatism, emphasizes the uniqueness of individual children, and the desirability of offering every opportunity for growth according to individual and groupcharacteristics. In the particular case of the children of Bourke, this philosophical base translated into encouraging boththe recognition of Aboriginal and European cultural origins, and also the essential task of helping children prepare forsuccessful schooling in the reality of modern Australian life.It considered that an education in Australia might suitably be at least in part directed at helping prepare the clients to be able to live comfortably in any part of the country they choose.

An element of controversy has arisen regarding the philosophy of the preschool, inasmuch as a 'pragmatic deficit' assumptionis implied (Poole, de Lacey & Rhandawa, 1985) that there arecertain skills and understandings, based on literacy and numeracy,which children must acquire in order to gain access to thebenefits, as well as the burdens, that any modern society offers.It is not claimed that the philosophical assumptions and basesdescribed here are the only ones suitable for this situation;but there is sufficient evidence that this base is among themost appropriate, for it to be both defensible and adopted, inthe estimation of the authors.

PROJECT ENRICHMENT OF CHILDHOOD

The prospectus for the project attracted the attention of the federal government which, together with the Australian MineralsIndustries Research Association (AMIRA), including the activesupport of the Comalco mining company, funded the project forits first three years. Additionally, the University of NewSouth Wales Medical School, where Nurcombe and Moffitt wereworking, provided administrative and some material suport. In1971, one of the present authors (de Lacey) was engaged aseducational consultant. The management team commenced adevelopment of the teaching and support program which tookaccount of Australian conditions, and which has continued to the the present day.

From the outset, the program was broad-based, as were itspredecessors, Headstart (in preschools) and Follow-Through (in the early primary-school years) in America. The preschool became a centre for parents and others, a place where both sections of the community felt welcome. A hospital dietician found substantialnutritional problems, and prescribed a supplementary, daily snack for the children. Local and university medical and dental visits were established to supervise the amelioration of healthproblems, assisted by a resident physician sponsored by the AridZone Project. The preschool component of the project was titledProject Enrichment of Childhood.

Within the preschool, an Aboriginal aide was employed asfunding allowed, a policy later expanded, with governmentassistance, to provide an Aboriginal-aide training position. This was a first experience in employment for these aides; andmany of them subsequently took up teaching, nursing and other professions, as did some non-Aboriginal aides. From time to time, as resources allowed, follow-up studiesof the progress of pupils and former pupils of the preschool were carried out, using tests which had been shown by the authors andothers to be reliable and valid in Australia (e.g. Taylor, deLacey & Nurcombe, 1972). A steady growth in the development of cognitive and language levels of development is suggested bythese studies, over the 25 years that the program has operated (Fig. 1). This Figure shows a gain for the preschool year of between ten and 22 scaled verbal-intelligence (I.Q.) points during the preschool year, followed by slower gains which were still ahead of avergage. Though it is likely that the gains are overstated by an estimated five I.Q. points, as a result of experimental mortality, these gains have remained fairly constant and significant, tending to rise at most points each year since 1969. The administration of diagnostic tests each yearhas indicated strengths and shortcomings in the program and theteaching, indicating remedial adjustments. All the testing was carried out by university researchers and their assistants. Several follow-up results have been published, as well as a summary of findings (de Lacey, Hunt, Cameron and Walker 1990). Of note was that, although most of the children showed gains each year at the preschool, there was a small group of about 10 to 15 percent for whom the measured gains were minimal.

While the major purpose of Project Enrichment has been to attempt to enhance the manifestly lower-than-average measured rate of development, a number of other results have flowed to the children, their families and the community as a consequence of the project. Though some of these results have not yet been quantitatively assessed, it is to them that we now turn.

EMOTIONAL DEVELOPMENT

The primary emphasis on educational enrichment in the preschool was upon cognitive and language development, argued by educators such as Bereiter and Engelmann (1966) to be the developmental areas in greatest need of attention if the life chances of young children were to be maximally assisted. The use of the structured programs advocated by these authors has been more recently attested in a review of programs for children performing below average by Cole and Chan (1990). A principal program based on the notion of structure is Direct Instruction, identified by Cole and Chan as the most successful of several they reviewed.

But, just as traditional preschooling is not confined to cognitive considerations, neither is enrichment preschooling. It has been proposed by one of the present authors (Walker), after teaching and advising in the program for several years, that the structure provided in the preschool timetable and some of lessons might also provide some stability and predictability for children whose lives are sometimes not particularly predictable. This provision could imply some emotional security as well as helping to develop cognitive and linguistic.

COMMUNITY INTERACTION

From 1969, the first year of the preschool, both Aboriginal and non-Aboriginal staff were employed, and mothers of both communities accepted rostering for the preparation of the daily snacks and other duties. From 1978, a condition of the continuation of government funding was that a local committee should be elected by the population of the town to manage financial and physical matters. The development of the program and training of staff was left to a program director, de Lacey succeding Nurcombe in 1976.

Several local officials and other citizens became very much committed to the establishment of the preschool after the initial work of Nurcombe and Moffit. For example, the Bourke Shire Council was generous in its support; and listed among the credentials for its being awarded the Bluett Award for Country Towns in 1970 was its backing of the preschool.

In its early days, the preschool represented one of the very few opportunities for the communities to interact regularly. The Constitution drawn up for the Committee requires representation of both Aboriginals and non-Aboriginals and the two groups have both filled executive positions.

On the occasion of the twenty-first anniversary of the Project in 1989, the Shire Council, local service clubs and past and present staff, pupils and visiting dignitaries collaborated in a well-supported celebration. When some other organisations were established in the region, the 'Bourke Preschool Model' of community cooperation has been quoted and followed on occasion.

STAFF PROFESSIONAL AND PERSONAL DEVELOPMENT

Though the primary and prior purpose of the Project is to serve the children and their families, attention is also paid to the professional and personal development of the staff. The professional development is an expectation of employment, in that staff are expected to attend lunch-hour and other seminars and to contribute to evaluative discussions during the visits of the program director and consultants. When they are invited to do so, the consultants are also available to assist with other matters concerning the staff, so long as this does not conflict with the primary purpose of the preschool.

PROFESSIONAL SUPPORT

Professional assistance has been offered by a variety of people, from Universities such as New South Wales, Wollongong and Western Sydney, several hospitals and government Departments, particularly Health and Community Services in New South Wales and, federally, Aboriginal Affairs and Social Security. One area to receive assistance early was the matter of nutrition. Soon before the commencement of Project Enrichment in 1968, dietitians from the University of New South Wales Medical School found the diet of many of the children to be too high in sugars and fats, and too low in fibres, minerals and protein. Consequently, an appropriate food supplementation was prescribed for the program in the form of a snack for all the children, half of whom attended in the morning and half in the afternoon. The incidence of upper respiratory infections, particularly among some of the Aboriginal children, was subsequently found to decrease, likely owing to the preschool nutritional program and other measures introduced in the community.

In the early years of the preschool, a washing machine was purchased both to launder preschool linen and to be available for parents who had no washing machine in their homes. Later, vitamin supplements were provided for the children, with the agreement of the parents and on the advice of local physicians. Fruit juice was provided daily, sometimes donated by a local supermarket. The teachers encouraged both children and families to select nutritious foods and to avoid practices hazardous to health.

Support has also been readily forthcoming from the medical world. One of the founding researchers of Project Enrichment, Nurcombe, a paediatrician-psychiatrist, arranged for regular medical and dental examinations of the children, using the preschool as a convenient base for this work. One physician found that, from a medical point of view, though there has been consistent average improvement in the children's health over the last three decades, there is still a small residual group of perhaps 15 percent who do not share this improvement. This finding is interesting inasmuch as it parallels the finding in psychological development mentioned above.

Again, support is provided by psychologists and educators. Four or five times a year, program directors and other researchers have visited the preschool since its inception to offer seminars for the staff, sometimes formally extending the staff's professional qualifications. It has been common for teachers in the other Bourke schools, as well as other professionals, to attend these seminars, some of whose contributors have included visitors from other Australian and some Canadian universities. The seminars deal with a number of topics relating to the development of young children, as well as management, program and community issues bearing upon the preschool. Assistance is offered to those staff who are developing or extending professional qualification through agencies other than the universities of the researchers.

Interaction among the staff, and between the preschool and the community, is assisted by one of the consultant researchers who is a counsellor, in matters including precluding and resolving conflicts and initiating productive, informative and enjoyable exchanges. As any difficulties with particular parents, families or others arise, this assistance is requested when required.

Liaison is also maintained with local and government agencies when the interests of the project are seen as being served. The principals and staffs of local schools are invited to comment upon the program and their perceptions of its effects and to make suggestions. At the end of each year, the preschool children are tested to assess the effectiveness of the program, and to provide information to be the basis of continuing modifications to the program.

Children with particular conceptual or language difficulties are identified and a home-liaison staff member visits their homes more frequently than other homes to provide extra teaching and to assist the parents in coaching these children.

PROFESSIONAL VISITORS

From time to time, the consultants arrange visits by educators, researchers and others who are likely to contribute constructively to the Project. These visitors have included people from other universities in Australia, New Zealand, Canada, the United Kingdom and the United States; and other educators from the

Pacific Islands and other parts of Australia. Opportunities are arranged for these visitors to meet local groups and parents and, sometimes, to offer seminars and workshops, providing an infusion of ideas and experiences not always so much available to remote, rural communities.

Such visitors can often support cultural diversity without implying divisiveness, and can help enhance the self-esteem of some of the minority groups in a remote community.

CONCLUSION

Although the prior function of the preschool was initially conceived as essentially a research-based enrichment program to enhance the conceptual development of young children in a way likely to help extend their life opportunities, the Program has made several other contributions to the community, both in sharing its resources among other community groups and individuals and also by enriching the life experiences of many people in the community, including some not directly concerned with the Program. The Project has interacted with other support services in Bourke, not all of them established with such interaction in mind. It is therefore suggested that substantial projects designed for assisting rural Communities might consider in their terms of reference an intention to collaborate with services or projects already extant in these communities, in order to help increase the effectiveness and efficiency of all such projects.

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EFFECTING CHANGE IN RURAL COMMUNITIES: A LOW-COST COMPUTER-BASED APPROACH TO DISTANCE EDUCATION OF SCHOOL PERSONNEL

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ABSTRACT

Opportunities for continuing education for teachers in many rural communities are very limited because the expertise for the training is located great distances from the communities in which they work. Providing in-service instruction to teachers in rural settings must be based on the practical application of technologies and on a close working relationship between universities and local school personnel. The paper describes a distance education program that arose out of a partnership with several school districts and has been offered by Indiana University for five years. The paper explains how to set up and use a low-cost computer-based distance education network to provide in-service training to school personnel. It also discusses guidelines for selecting technologies to supply the training, gives principles for course and program development, and explains advantages of distance education over traditional on-campus instruction.

INTRODUCTION

Affecting change in special and general education will require new approaches to offering in-service, continuing education coursework to teachers who are already working in public schools. Teachers today are facing an increasing array of changes and challenges in their professional responsibilities that makes it essential for them to have easy and ongoing access to training. Distance education offers a very viable and exciting means of providing this training especially for teachers in rural communities (Knapczyk, 1993; Knapczyk, Brush, Rodes, & Marche' 1993). But discussions of distance education too often focus on rapidly developing high-end technologies, with their astonishing promise for future communication — and their even more astonishing price tags. In the excitement over new technological achievements, we often lose sight of the more practical issue of how to develop a workable model for distance education in the present times of tight budgets and limited resources. We may forget that the quality of distance education depends less on the sophistication of the technology employed than on the skillful harnessing of available resources — both technical and human (Keegan, 1990). To be successful, in-service instruction must be based on the practical application of technology to teacher education, and on the partnerships that universities and school corporations can form in offering field-based courses and practicum experiences (Evans & Nation, 1989; Keegan, 1990; Smith & Kelly, 1987; Verduin & Clark, 1991).

DESCRIPTION OF INDIANA UNIVERSITY'S PROGRAM

For the past five years, Indiana University has been offering in-service coursework through distance education and interactive communication technology at an expense comparable to the cost of traditional campus-based instruction (Knapczyk, Brush, Champion, Hubbard, & Rodes, 1992). The teacher education program at Indiana University arose out of a partnership between the university and several school districts. The teachers take part in the training as members of school-based collaborative groups and they use the concepts and practices presented in the courses directly in their own classroom and school situations.

When we designed the field-based program at Indiana University, we combined traditional college courses and on-site practica into one unified and comprehensive training experience. The teachers implement the theoretical concepts discussed in class immediately in their own professional settings, and use the information to plan teaching lessons and behavioral interventions. The course instructors design their presentations to encourage collaboration between students during the class sessions, and structure practicum projects that promote continued interactions among the students after the meetings.

The combination of distance education and communication technology allows teachers to obtain the coursework without traveling to the university. However, unlike in-service workshops, the program continues for an entire school year and teachers have ongoing access to their instructors through the interactive communication technology. Thus, the program ensures that teachers do not feel isolated or "cut off" from either their instructors or their colleagues after the individual training sessions are completed. In the next sections, we will discuss some guidelines, drawn from our experiences, for choosing appropriate technology and for structuring field-based training.

A LOW-COST OPTION FOR DISTANCE EDUCATION TECHNOLOGY

The cost of distance education is a major consideration in selecting an approach to use, because of the limited resources universities and school corporations have for field-based teacher preparation. In our program we use basic, low-cost, reliable technologies to deliver weekly classes to remote sites, typically in local high school libraries or meeting areas. Each hardware and software component fulfills specific roles in course delivery. We will discuss each element in turn.

Speaker phones provide our basic communications link with teachers during the class sessions. Speaker phones are relatively inexpensive and can be used virtually anywhere, and the teachers adapt quite readily to them because they are so familiar. We use the AT&T Quorum telephone system, which supports an excellent omni-directional microphone and a fairly clear speaker, two elements that are crucial for effective communication. While ordinary speaker phones are sufficient for instructing small groups, high-quality microphones and speakers enable us to teach twenty or more teachers in a session. At the originating site, we use operator-style headsets to increase the clarify of the presentations.

Facsimile machines permit continuous access and rapid feedback between university instructors and teachers. The teachers complete ongoing practicum work each week, and fax their worksheets to the university before the next class. They also send notes if they need clarification or have special difficulties. The instructors return feedback to the teachers' work sites by fax, enabling the teachers to put any advice or direction into practice immediately. The fax machines are also used at class time to transmit supplemental course materials, instructions for in-class activities, attendance lists and other documents to and from the class site.

Audiographics supplies a visual component during the class. Audiographics is an interactive computer-based technology that allows users to share text and graphic images, and annotate images displayed on monitors or projection devices (Knapczyk, 1990). The system we use consists of the following:

- Macintosh LCII computers at the university and remote sites,
- 9600 bds modems operating over standard telephone lines,
- An n-View LCD overhead projector at each remote site.

We use the computers as a two-way overhead projector or chalkboard to illustrate our presentations, to emphasize important points in a discussion, and to develop an interactive exchange with the teachers at the remote site. To accomplish this, the system employs the following software:

- AppleTalk Remote Access, to establish the communication link between computers through the modems,
- Macintosh Multipoint Interactive Conferencing Application (MacMICA), to create a shared "electronic chalkboard" between the sites,
- Timbuktu, to control the remote computer and to access and configure software applications,
- SuperPaint, to create PCX or PICT images of course material, such as overheads, that are pre-shipped to the remote sites before class time.

This combination of technologies and software allows us to complete any needed class preparation at the origination and remote sites. The instructors and students can simultaneously speak with one another, and see and annotate graphic images of course materials. This entire system can be purchased for about $2500 per site, but most universities and many school corporations already have some of the major components. The only additional costs for operating the system are monthly telephone charges. Comparable software configurations can also be purchased for MS-DOS users.

TIPS FOR TECHNOLOGY SELECTION

We have found that the choice of technologies to develop and deliver training through distance education should take into account the following principles:

Use what is available. In the rush to embrace new technologies, educators can easily overlook the usefulness of more commonplace inventions. We discovered, for example, that the speaker phones and fax machines are the most powerful and versatile equipment we have. They can be set up almost anywhere and be used at any time, and they allow a greater and more free-flowing exchange of information, ideas and advice than is typical even in a normal campus class. The fax allows us to send backup copies of class materials and overheads to our sites in case the computer link breaks down during class. Before investing in high-end technologies, then, it is important to explore existing or readily available equipment such as fax machines and telephones.

Choose reliability over sophistication. We also discovered that reliability and consistency are far more crucial than impressive effects when delivering distance instruction. Typically, the most elaborate and sophisticated technologies we have used are the ones most prone to bugs and breakdowns that can quickly erode the confidence and morale of the teachers on site. For example, MacMica is an invaluable communications tool because it is simple to operate and seldom "crashes", even over the primitive telephone lines and switching devices that often exist in rural settings. These features make it far more valuable than other more powerful products that tend to be more finicky.

Have the goals of the program drive decisions about technology. Before investing in any equipment, it is important to have a very clear idea of what the instruction is to accomplish, what materials will be used, where class sessions will be delivered, what resources are available in the field, and who will be included in the training. Considering these issues carefully before deciding about technology will save a great deal of time and money. In fact, program development is by far the most important part of creating a distance education course, even when working under a generous budget. Establishing clear goals for the program, and treating technological questions as a subordinate issue, ensures that the equipment used and the way in which it is employed will be well suited to the instructors' and teachers' needs.

GENERAL PRINCIPLES OF PROGRAM DEVELOPMENT

Distance education technologies provide the tools for instruction that can be used in many ways and be adapted to suit a wide variety of demands, constraints and circumstances. Instructors and program developers should, however, first decide what outcomes, goals, and objectives they wish to accomplish in the program and coursework. The following principles, can be used as general guidelines for structuring coursework using distance education (Helge, 1984; Keegan,1990; Knapczyk, 1991; Treadway, 1984). The coursework should:

- Offer training that is practical, useful, and oriented to job responsibilities,
- Be flexible and address a wide range of individual needs
- Assist trainees in the shared development of their own skills and promote ownership in the program,
- Offer opportunities to practice and apply skills in realistic circumstances,
- Utilize local resources and expertise in program planning and delivery, and
- Employ technology effectively and encourage various modes of participation.

These principles can create many unique challenges for course instructors who work with in-service teachers. They also represent unique opportunities, if properly planned for. In the next section, we will discuss three areas in which distance education offers distinct advantages over traditional instruction for addressing the principles described above: (a) promoting ownership through on-site coordination, (b) promoting application of training to on-the-job situations, (c) encouraging collaboration.

PROMOTING OWNERSHIP THROUGH ON-SITE COORDINATION

One challenge of distance education is handling the logistical and instructional tasks that arise in any normal class session. We have found that these tasks are best carried out by the teachers themselves. Adult learners bring a wealth of professional skill and experience with them to their classes. Properly structured, distance education can capitalize on these experiences in a manner that facilitates the mechanics of course delivery, enriches the content and teaching interactions of the class sessions, and more closely involves teachers in their professional development.

To accomplish these aims, we have two different teachers serve as coordinators for each session. One person coordinates the technical set-up of the class by assembling the equipment for class and establishing the voice and computer link-up. As the year progresses, each teacher learns about the technology and becomes comfortable with its operation, thus removing the initial apprehension teachers often have about participating in a distance education activity.

The other coordinator oversees the instructional aspects of the class sessions. This includes passing out papers and working out seating arrangements for small group activities, as well as assisting with the actual course instruction. We prepare the coordinators for these responsibilities by talking with them before the class sessions to explain the topics that will be covered, outline the roles they will serve, and suggest methods for carrying out the duties. This preparation enables coordinators to oversee class discussions, re-direct questions back to the group, present examples of course concepts, and explain how procedures and techniques can be used in situations that all the teachers are familiar with. The on-site coordinators personalize the class activities and allow for a fuller consideration of the concepts and techniques covered in the course, thus shifting the responsibility and ownership of the instruction onto the teachers themselves.

PROMOTING APPLICATION OF INSTRUCTION TO ON-THE-JOB SITUATIONS

In many in-service programs, teachers have very few opportunities to apply the concepts they learn to actual teaching situations until much later in a practicum or student teaching experience. However, learning under "artificial" circumstances is often not very effective because teachers typically have considerable difficulty transferring abstract concepts to real-life job situations.

We offer training for one to two years, and we show the teachers how to fully integrate theoretical concepts into teaching practices that suit their job situations. A prime benefit of providing instruction over a long period is that it allows us to create opportunities for the teachers to practice new methods, to use them in combination with other methods, and to adapt them to fit a variety of teaching contexts and situations. Thus, as teachers learn new teaching skills, they also learn how to put them together with the skills they already have so as to form increasingly complex and unified teaching behavior. The extended training approach allows us to tie the concepts covered in the program directly to the teachers' existing knowledge and skill base. At the same time, the instructors learn increasingly more about the teachers' particular circumstances, and can access technology that permits easy and frequent communication with each teacher.

ENCOURAGING COLLABORATION AMONG TEACHERS

Research has repeatedly shown the value of within-school professional team building and collaboration among teachers (e.g., Thousand & Villa, 1989). However, in traditional models of teacher preparation, strategies for collaboration are usually not built into the instruction. In fact, the design of many teacher education courses discourages, rather then encourages, collaboration among students (Resnick, 1987).

Because our program is field-based, we can attract groups of teachers from the same school or school district, and can incorporate collaborative team building techniques into the very structure of the coursework. The coursework encourages teachers to share their ideas and build closer professional relationships with one another. Thus, they work with expert mentors that include both the university instructors and other teachers in their school building. We use a variety of in-class activities in which teachers share their experiences and help one another apply and adapt the course concepts to their teaching circumstances.

Out-of-class projects are assigned on a collaborative basis so as to continue this professional dialogue about course topics. The students meet in school-based groups to discuss the concepts presented in the class sessions. Then, they work together to prepare lessons and interventions for the children in their classrooms. By working together, the teachers can access a wealth of expertise, resources, and information that would otherwise remain untapped. Furthermore, after the year-long training is completed, the collaborative teams often remain intact, thus providing the teachers with a ongoing peer support structure.

SUMMARY

The key to preparing the teachers of today to carry out their professional responsibilities is not necessarily found in high-priced technologies, but rather in developing a new level of cooperation between universities and public schools and exploring new ways to offer coursework. Even at a low cost, distance education and communication technology can help to give teachers access to current information on teaching practices and provide a catalyst for improving the quality of teacher preparation and educational programs for children.

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A RURAL AND REMOTE CHILDREN'S MOBILE SERVICE - WANAARING

Elisabeth Nommensen — Australia

ABSTRACT

The Contact Children's Mobile was established in 1987 by Contact Incorporated (Project for Isolated Children) based in Sydney. Funding was provided by the Bernard van Leer Foundation - an international philanthropic institution based in the Netherlands.

The Mobile aims:

- to provide educational and social enrichment opportunities for children aged from birth to twelve years (through playgroups, preschool sessions, afterschool and vacation sessions)
- to provide assistance, information, referrals and support to people caring for young children in geographically isolated circumstances
- to promote awareness of child development and health issues in the wider community

The field team is based in Wanaaring, 200 kilometres west of Bourke, population 60. The two teachers travel an average of 800 kilometres per week over unsealed roads in a specially equipped Landcruiser, making home visits or holding day-long sessions on remote properties or at local community venues.

The region covered by the Mobile is an area the size of Tasmania (or Belgium and The Netherlands together) and staddles both sides of the far north west New South Wales and far south west Queensland state border. The border is marked by a two meter high "Dingo" fence.

The seventy-five families (130 children) are seen only once per month, so the team also concentrates on disseminating information through the post, loaning toys, books, cassettes, and videos to parents, and compiling a *WHO TO CONTACT* list of agencies that these remote families may access by telephone.

The project has been monitored closely by the Bernard van Leer Foundation so that it may be used as a model for similar services worldwide. An independent evaluator, Dr Ailsa Burns, from Macquarie University, has presented a regular report on the field work. Using data from staff reports, session evaluations, written parent surveys and parent interviews, a Summary Report of the project was compiled in September 1993. This marked the changeover to funding by the Australian Government (once van Leer's establishment funding ceased) after strong lobbying by affected families.

The following recommendations were highlighted:

1. that the programme continue to work towards the aims as set
2. that maintaining liaison with local, state and federal government bodies and other relevant agencies be given high priority (especially with regard to health, education, and community service issues affecting the border region)
3. that the project be managed and administered regionally by the community it serves and that an appropriate management structure be established
4. that networks continue to be promoted and consolidated between remote mobile services to both statewide and nationally

To compensate for distance and to enable the service to reach the wider community the mobile team:

- sponsors a morning *PARENTING* segment on 2WEB Outback Radio
- produces a *KIDS PAGE* in the Bourke Western Herald and in local community newspapers
- sets up activities and displays at Agricultural Field Days, and arranges seminars and visits by Health Specialists to remote communities

The challenge for the team is to coordinate schedules and projects and liaison with:

- two Royal Flying Doctor bases (Charleville, Qld and Broken Hill, NSW)
- four Schools of Distance Education (Charleville, Qld and Broken Hill, Dubbo and Bourke, NSW)
- three local one-teacher schools (Thargomindah, Eulo, Qld and Wanaaring, NSW)
- local and regional health and community service representatives

The Contact Children's Mobile attended in April 1994, the *NATIONAL REMOTE MOBILES MUSTER* in Alice Springs, where over thirty similar services from every state gathered to exchange information and to set the groundwork to establish an Australia-wide association for such services. This conference was jointly funded by the Bernard van Leer Foundation and Federal Department of Human Services and Health. Issues that affect rural and remote communities and ways in which the field services may use available resources to address them were high on the agenda.

The Contact Children's Mobile was established in 1987 by Contact Incorporated (Project for Isolated Children) based in Sydney. Funding was provided by the Bernard van Leer Foundation, based in the Netherlands. This international philanthropic institution funds innovative services in Australia and overseas countries to promote the development of young children and their families. The Foundation was pleased to monitor the success of the Mobile in terms of increased access and equity for the target population in the event that it may be used as a model for similar children's services.

The remote region serviced by the Mobile is an area larger than 36,000 square kilometres[1]. One unique aspect is that the scattered target population live on both sides of the two-metre high 'Dingo Fence' that aligns with the far-western state border of New South Wales and Queensland.

The field team is based centrally within the target region in the tiny outback village of Wanaaring, 200 kilometres west of Bourke, population 60. The two teachers travel an average of 800 kilometres per week over unsealed roads in a four-wheel drive vehicle, making home visits or holding day-long sessions on remote properties or at local community venues.

THE CONTACT CHILDREN'S MOBILE AIMS:

i) to provide educational and social enrichment opportunities for children aged from birth to twelve years (through playgroups, preschool sessions, afterschool and vacation sessions)

ii) to provide assistance, information, referrals and support to people caring for young children in geographically isolated circumstances

iii) to promote awareness of child development and health issues in the wider community

iv) to support local community activities and advocate on behalf of rural and remote families on relevant issues

v) to promote networks between mobile children's services statewide and nationally

During more than six years of operation the Mobile has developed through two major phases. Firstly, the pilot phase from 1987-1990 and secondly the consolidation phase of the existing service, from 1990-1993 with more specific objectives and extensions into new areas. Currently the service is in its third phase, a transition phase, from 1993. This is due to a change in funding body and management structure. Reports and evaluations of the first two phases were made by an independent evaluator, Dr Ailsa Burns, from Macquarie University, Sydney. As a result, the service has been continually refined according to the recognised needs of the community and the resources available both within and without the region.

The Contact Incorporated Coordinator, June Jeremy, presented the original submission to the Bernard van Leer Foundation in 1986. In the two years prior, her field work as Coordinator of Contact

Incorporated[2] (the eventual sponsoring body), involved visits and needs assessments regarding early childhood services in the far north west of New South Wales. In July 1987, the Mobile service received an initial funding grant for a pilot phase of three years. It was envisaged that an Australian funding institution would take over financial responsibility once the project was established.

During Phase One (1987-1990) the focus was on early childhood education and health promotion, along with the development of resource materials (books, videos, print media) appropriate to the needs of the region. The field team consisted of a qualified early childhood teacher and a registered nurse, with a project assistant providing part-time clerical support. A part-time radio presenter and technical officer were employed from outside the region to support the project. The Mobile was based in Wanaaring at the Lila Leigo Centre which had once been the Bush Hospital and later a children's hostel for out-of-town students attending the one-teacher local school. The Centre functioned well as office and living accommodation for the Mobile workers. The large yard also proved suitable for playgroup sessions which coincided with monthly Flying Doctor[3] visits to the next door clinics.

A specially-equipped Toyota Troop Carrier was used by staff to travel throughout the region and locate families with young children. The aim was to link these isolated families with young children together through a regular playgroup / preschool session at a central venue. Staff identified needs through consultation, interaction and evaluation of introductory programmes.

The Annual Report 1988-89 noted that the service was in recess over midsummer due to extreme temperatures (40-50 degrees) and unusually high rainfall led to closures for long periods of time after this season. Despite these setbacks the team was able to establish nine venues for sessions in Wanaaring and outlying stations and communities, during its first year of operation. A total number of 80 children were involved.

In order to assess the impact of the service on families in the region a workplan and evaluation procedure for the project was outlined and submitted to the Bernard van Leer Foundation in the first annual report.

The evaluation procedure was to involve:

i) assessing participation rates and developing an index to measure the quality of participation by children and families

ii) monitoring the development of parent self-help groups and the ways in which such activities become self supporting

iii) evaluating changes in children and parents (e.g. physical, social and nutritional aspects of development)

The Evaluation Report in Year Two redefined the procedures:

> "The programmed attracted not only preschoolers but also some older children who attended after school (in Wanaaring) or who juggled their School of the Air lessons so as to take part along with their younger siblings...some very young children also took part, including several babies...the number of children seen per month ranged between 22 and 69. Some children, and parents of course, attended multiple sessions per month, while some in the remoter areas were seen only monthly, or even less frequently. The complex and changing pattern of attendance raises major difficulties for evaluating the 'success' of the programme with participating children. (Another problem here was the lack of a 'control' group, since of course all children in this remote area were accepted into the programme). It was decided accordingly to define success in terms of mothers' perception that the program was aiding their children and themselves. A survey of families enrolled in the Contact Mobile programmes was therefore conducted in June-July 1984."

After statistics were compiled, it was considered vital for the team to plan and implement group and individualised programmes for day-long play and learning activity (allowing for one and a half hours' travel each way for some families). The Mobile sessions provided children with an opportunity to socialise with other children in their area and ensured equitable access to such services by the target population.

In the Phase One Summary Report, 1987-1990, parents commended both the cognitive and the social stimulation provided by the programme.

> "...93% felt that the programme had given their children 'a great deal' or 'quite a lot' more interest in art and craft activities, 73% said the same in respect of music and dancing, 76% in respect of books and reading, 85% in respect of learning to get along better with other children, and 76% in respect of learning to do things as part of a group. Specific gains mentioned were learning to mix, to take turns, to share, to cooperate, to accept not being the centre of attention, to express feelings in art, to develop physical coordination... and to 'really enjoy themselves'."

In effect the team endeavoured to enhance the quality of life of these isolated children by provided **SPICE**, i.e, Social, Physical, Intellectual, Creative and Emotional opportunities.

At the end of 1989, the Commonwealth Department of Community Services and Health after receiving a submission, advised that it was unlikely to be in a position to consider funding the mobile service until 1993. It did acknowledge however, the value of such a service for the target region. The Bernard van Leer Foundation then agreed to fund a second phase of the project, 1990-1993.

One objective during this phase, as in the first, was to stimulate parents to improve parenting skills and family self-management. Staff constantly sought to reinforce the value of parents' role in the education of their children. Therefore parents as well as children were encouraged to make the most of the rare opportunities to interact with others from within a 100 kilometre radius.

In the first phase of the Mobile it was noted in the evaluation report that out of survey respondents:

> "...75% believed that Contact had given them 'lots' or 'quite a lot' more ideas about helping children learn things, 90% believed that they had given them at least some help in handling difficult behaviours, and 100% believed that getting ideas by watching the team at work was 'important' or 'very important'."

The value of sessions for mothers who were socially isolated themselves could not be underestimated (fathers, usually pastoral workers, were mostly unable to attend the midweek sessions). In the Phase Two Summary Report the evaluator reported that 100% of respondents to the 1993 survey believed the social contact for mothers was important or very important, 88% thought that Contact had brought families in the area into closer contact.

In a recent Australian survey of 12,000 rural women (Wahlquist 1993)4 it was identified that non-recognition of womens' 'contribution' and their inability to talk to other family members about their problems, were major stress factors. Dr Burns recommended in the Phase Two Summary Report that:

> "...in setting up a programme of this kind the possibility that mothers may need the programme as much or more than the children be borne in mind from the beginning."

When it is considered that the mothers in this target region are the primary caregivers and educators this is a relevant issue. The Contact Mobile sessions each month may be their only social contact with others in similar circumstances and an opportunity for 'time out' from their children.

As a result of this understanding over time the service delivery has altered to suit the caregivers' needs. In the early stages of the Mobile, the Health Worker addressed the parents regarding particular health topics in a formal discussion segment. The team later reported that major health problems in the area were quite well provided for by the existing services, i.e. Wanaaring Community Health Nurse and regular Flying Doctor and specialist visits throughout the region. The Mobile Health Worker position was phased out after two years and the field team comprised two qualified teachers after that time.

The formal segments were also phased out which enabled parents to interact more with other children and adults during the session. Many parents reported a preference for this change and seemed more prepared to raise issues informally with other parents and team members. As a result earlier assessments and referrals were made and support provided as appropriate.

The field team consolidated these informal sessions with increased home visits wherever possible. These home visits strengthened the bond between staff, children and parents. They also enabled parents to raise their specific concerns in private, and provided a forum for open discussion regarding what the service could offer individual families. Suggestions and special requests by parents and carers were taken into account which enabled the session programme to be more integrated with family and individual needs. This regular portable activity, whether situated on grassy homestead lawns, treeless paddocks, dusty halls or small school yards, has been evolving as a more meaningful experience for all as a result.

The media component of the programme was a significant one in that it provided relevant materials for extending the programme into the home and enhancing and developing local parenting skills. Parents and children took part in the production of five videos from 1987-1989: *Talking Together, Lots to Learn, Songs for Kids, Growth and Care of Kids*, and *Play for Kids*. In 1993 a further series of five videos was produced entitled *Watch Me Grow*. This involved a commentary on the stages of development of children up to five years of age. The images reflected the lifestyle and parenting practices of outback families, both aboriginal and non-aboriginal. These were distributed to families and other mobile services and continue to be sold to community agencies and educational institutions outside the region.

Also produced were booklets to supplement the video series which were prepared by staff after consultation with parents. A *Who To Contact?* regional information guide was produced during 1992-93 for families requiring the services of multidisciplinary agencies in both New South Wales and Queensland. Storybooks set in the outback with titles such as *The Ultra Light* and *Billabong Bunyip* were published during the second phase. These provided the opportunity for children within the target region to recognise their identity as outback dwellers in literature. Car stickers and posters carrying child care messages also proved very popular, with phrases such as 'Hugs not Drugs', 'Smile and Kids Smile with You', et cetera.

To enable the service to reach the wider community, to Mobile team coordinated a daily *Contact with Kids* radio programme. The ten minute segment which included parenting ideas and information, discussion of health topics and children's songs and stories, was broadcast from 2WEB Outback Radio (Bourke). The listening area reached well beyond the project area into communities serviced by other Mobile units and into the wider south-west Queensland region.

It was envisaged that this segment would compensate for distance and inaccessibility and extend the session programme. After reassessment of the impact of the programme it was found that the 2:00 p.m. timeslot posed problems for children and mothers involved with the mobile to listen in. Fathers were found to listen more, since the radio was tuned in while they worked in shearing sheds or were driving. Over time the format changed, from being directed at children to targeting care givers. Interviews with early childhood and health professionals predominated, although the children's songs and birthday calls remained.

The regular travel into the studio, a 200 kilometres drive on one of the worst roads in New South Wales, and the time involved for the field team in planning and preparation took its toll on staff workers. The team was simultaneously endeavouring to establish a high profile service in the community, establish rapport with families in the target region, prepare session programmes, and travel to venues, often requiring overnight stays in the field. Their technical skills were at first limited and they lacked experience in radio presentation. Eventually a part-time radio presenter, based in Bourke, was employed to take over the coordination of the daily segment.

Dr Burns recommended that:

> "...in setting up any similar scheme it would be useful to:
>
> i) arrange pre-training workshops, and
>
> ii stagger the introduction of services perhaps by concentrating initially on the radio programme, and introducing the Mobile service some time later."

A Resource Group was established to provide support and advice to the project team. It consisted of health and educational professionals living in larger centres outside the region, with representation from Queensland and New South Wales state government departments and a local Wanaaring resident.

This group liaised with the field workers and with their own constituency. They provided information which often proved relevant to the needs of the community. For instance, one unexpected outcome of input by a Resource Group member who was involved in Tertiary and Adult Further Education (TAFE) was that adult education Workshops in the region increased. The field team became involved in the coordination process at the local level and facilitated access to Further Education services by the target population.

Under Bernard van Leer Foundation guidelines, a training and professional networking component was written into the Workplan of the project from the outset. This enabled such forums for communication across disciplines and bureaucratic divisions to take place.

The Contact Mobile, under the umbrella of Contact Incorporated, has been closely involved in training, networking, and policy-making regarding rural and remote mobile children's services, both statewide and nationally.

Birdsville, April 1991:	The Australian National Remote Area Mobile Muster
Adelaide, May 1992:	Australian Remote and Isolated Children's and Family Service Mobile Muster
Little Wobby, August 1992:	Networking and Communication Seminar for New South Wales Projects funded by the Bernard van Leer Foundation
Bourke, March 1993:	Borderlink Training and Networking Seminar (for Mobile and Distance Education Units delivering services to the NSW/Qld border region)
Canberra, May 1993:	Consultation of state representatives of rural an remote mobiles with Australian Government representatives
Alice Springs, April 1994:	National Rural and Remote Mobile Muster

This involvement and the resulting reports and recommendations have gone some way in addressing the issues facing not only remote communities but those providing direct and indirect services to them.

These meetings, inservices and networking sessions enabled issues at the project level to be raised and comparisons and distinctions to be made between sometimes diverse services. For instance, the relatively long established Remote and Isolated Children Service (RICE) based in Port Augusta, South Australia, has a large team of trained health and educational workers utilising air, rail and road travel, as well as postal and radio services to reach remote communities within their state boundaries where there are children under five years of age. This project is accountable to two state departments and of course differs greatly from other small mobile units in other states who are sponsored by local committees. These smaller units may have only enough funding for two untrained workers who are endeavouring to provide a similar service to outlying communities.

Reports from the seminars include recommendations regarding community/government liaison, management structures, budget models, policy changes, and the specific needs of rural and remote families in varying circumstances. The Department of Community Services and Health prepared policy documents as early as 1987-

88 for Mobile Services. For these the establishment criteria of the Contact Children's Mobile was taken into account. Since then the Department of has given consideration to recommendations from Mobile Musters — the policy documents have been reviewed accordingly.

At the recent Alice Springs Mobile Muster, 1994, over thirty teams were represented from all over Australia, as well as commonwealth departmental offices in Canberra and other capital cities. Besides information exchange, professional development workshops and discussion of issues affecting targeted communities, a National Association of Rural and Remote Mobile Children and Family Services was established. This was the culmination of several years of Contact Incorporated's national networking and would not have been possible without the generous funding and support of the Bernard van Leer Foundation along with the Commonwealth Department of Human Services and Health.

The Contact Children's Mobile, since July 1993, has continued into its third phase, the *transition phase*. The transition is a two-fold one. On one level the change is in the funding body, with Bernard van Leer Foundation handing over financial responsibility to the Australian Government. On another level, there is a planned change in the management structure. Some time after July 1993, it is envisaged that Sydney-based management, Contact Incorporated will hand over the practical management responsibility to a newly elected regional committee. The committee will consist of one elected representative from each of the nine service regions. Most meetings will take place via teleconference due to the vast distances between committee members.

Nothing has done more to empower service users than the funding crisis experienced during 1993. Foundation funding was due to end on June 30, and close to that date there had been no advice by the Australian Government regarding commitment of funds for the continuation of the project. This was despite a submission made over twelve months before.

As recorded in the Phase Two Summary Report (1980-1993):

> "Parents and community members were mobilised to lobby parliamentarians and were eager to support the mobile in this way. The crisis made clear the sense of 'ownership' of the mobile that both parents and children felt."

The Australian Government finally agreed to continue the provision of the mobile service to the 135 children by then enrolled. This was in the main due to the Minister's realisation that no other early childhood service existed in the region. The government had recognised its responsibility and commitment to provide families in the target region with access to services similar to that which their urban counterparts take for granted.

Mobiles are considered to be one of the most flexible and versatile family services, ideally suited to meet the needs of families with young children in remote and isolated areas of Australia where the pockets of population are too small to support centre-based services.

At the National Conference on Pre-School Education for Isolated Children in 1974[5] highlights a distinction between *rural dwellers* who are able to draw upon the services of a 'rural town' and *outback dwellers* who operate as a nuclear family and are totally dependent upon the limited resources within the homestead. The distinction between rural and outback dwellers still remains today.

Despite the electoral insignificance of these small settlements of outback dwellers, the children and their caregivers have a right to equitable access to services. Services such as the Contact Children's Mobile continue to provide resources for loan, parenting information and support. They also provide a regular catalyst for social interaction and educational and cultural experiences. Their flexibility enables the team to coordinate schedules and projects and liaise with other health and educational organisations who target services to the same region, e.g. Royal Flying Doctor Services, Schools of Distance Education, local public schools, and regional health workers.

The Contact Mobile will continue to work towards the aims as set, and to maintain liaison with local, state, and federal government bodies and other relevant agencies as a matter of priority. This way the quality of life of outback families may be enhanced by the opportunity of access to relevant services regardless of where the families are geographically situated.

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[1] An area the size of Tasmania (or Belgium and the Netherlands together).

[2] Contact Inc. is the special ongoing NSW project from the International Year of the Child, 1979.

[3] Royal Flying Doctor Service, Broken Hill Base.

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SCIENCE ADVENTURE————> 2000

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ABSTRACT

HYPOTHESIS

While science concepts are in a state of permanent transience, there is, nevertheless, a proven method that can be utilized to examine the ever-changing, expanding world of information available. At a zero-dollar cost to a system's budget, a community can be mobilized to generate the necessary equipment/materials necessary to conduct modules of elementary science activities, multi-disciplinary, hands-on and discovery-oriented.

MATERIALS

Everything is shared, donated, recycled, or on loan among students, families, businesses, communities.

PROCEDURE

Based upon a community's needs, a set of learnings is proposed for students, that integrates science skills, increasing in sophistication with level of learning. This spiral of experiences is supported by materials that have been acquired through the above-noted methods. No text needed.

OBSERVATION

Students, teachers, parents, community members that have an investment in any program are inclined to support it, and find new and innovative ways to expand it.

CONCLUSION

This proposal is outlined as is our award-winning program: as a problem-solving, no-cost challenge that features teaming, cooperative learning with welcome input from all segments of our community. We are 100 percent participants in science education.

PROJECT OBJECTIVES

While science concepts are in a state of permanent transience, there is, nevertheless, a proven method that can be utilized to examine the ever-changing, expanding world of information available. At a zero-cost to a system's budget, a community can be mobilized to generate the necessary equipment and materials to conduct modules of elementary science activities, multi-disciplinary, hands-on, and discovery-oriented.

The basic objectives of this program provide the foundation for its success:

(a) to understand how science, technology, and society influence one another;

(b) to understand ecological and environmental problems of the day;

(c) to develop elementary laboratory skills that will enable the student to experience scientific concepts and phenomena directly;

(d) to learn and apply the scientific methods of investigation within the science curriculum and in other curricula;

(e) to develop a knowledge base of facts, concepts, conceptual networks and process skills;

(f) to expose students to settings such as outdoor education centers and museums to view or become introduced to subject matter that includes issues of social concern, such as pollution, ecology, and energy education;

(g) to increase awareness of careers in science and technology;

(h) to develop a positive attitude toward and a familiarity with, scientific principles.

Mission Statement

This program has a dual mission;

1. Science is meaningful, alive, and an integral part of the lives of our students.
2. Teachers are supported in their efforts to acquire science knowledge and experience joy and satisfaction working the process.

Target Population

The target population for this program is the entire student body. The setting for Mansfield Township, in New Jersey is Kindergarten-Grade 6, of rural, low to middle socio-economic status, predominantly white (85%) with a mix of minorities (15%). Those receiving special education services number 12%. The school is located approximately two-hours by bus from the mountains, the seacoast, and urban areas.

Spiral of Learning

Based upon the community's needs, a set of learnings is proposed for students that integrates hands-on science skills, increasing in sophistication with the level of learning and age of the student. This spiral of experience is supported by materials that have been acquired with the above-noted objectives in mind. No text is needed. A district might seek to introduce, then develop with increasing sophistication, a spiral of processing that includes:

a. predicting an outcome

b. designating the problem

c. evaluating the validity of a given hypothesis

d. recording data

e. designing a solution

The offering of an ever-increasing level of abstract-thinking and applied skills is one of the most exciting features of the program.

Hands-On Activities

It would be difficult for this writer to single out an example. One that may be of universal interest is the experience that Mansfield K-6 students have in paleontology.

Educators commonly make ıfossil printsı as a kindergarten student activity. It is possible to design an additional four-tier exposure to paleontological exploration, Grades 1-6, that culminates by having the older students model an excavation site, employing the scientific skills required to make a successful study.

In Mansfield: **Paleontology**

Grade K - Sandprints

Grade 1 - Fossil-Making

Grade 2 - Simple excavation of a fossil

Grade 4 - Group excavation of hidden fossils

Grade 6 - Excavating a site

This curriculum also includes an excavating experience by students at a real site.

Materials Requirements: Paleontology

All of these activities require nothing more than:

sand	plaster of paris	small natural objects
string	stakes	

and careful attention to the process skills.

Yet another example from Mansfield Township:

Oceanography/Water Cycle

Grade K - Sink or Float
Grade 1 - Observing and Recording the Properties of Water
Grade 2 - Simple Ocean Study (comparing salt-fresh water,creating models of tides, currents, ocean floors)
Grade 3 - Advanced Properties of Fresh Water (the need for conservation, adaptations of people, animals, plants)
Grade 4 - Fresh Water Environmental Concerns (fish, fishing expedition)
Grade 5 - Advanced Ocean Study (including field experience to compare the ocean and marsh environments, simulations of/problems of exploration, pollution clean-up)
Grade 6 - Advanced Fresh Water Pond Survey and overnight environmental trip; telepresence at a real research site (JASON) with underwater robot on survey.

Materials Requirement: Oceanography/Water Cycle

Exclusive of the field experiences mentioned, materials needed for this spiral of learnings, like the spiral noted before, require only:

plastic tubs to hold water	objects that float or not	vegetable oil
clear plastic containers	ice cubes	teakettle

hot plate
tempera paint
rocks
straws
shoe boxes
string/sticks
feathers
food coloring
fish
detergent

Outcomes

The reader may note that the scientific concepts addressed K-6 demand that the student incorporate an ever-broadening set of thinking skills:

1. Water and its inhabitants have distinctive properties that can be altered by interaction;
2. Inhabitants of water are dependent upon one another, creating a community;
3. All living things are affected by and affect their environment.

See attached sample spirals on Environment and Scientific Process.

COMMUNITY INPUT

Only with a spirit of community can this program exist. A school will reflect the society it serves. This writer suggests that the local citizenry will respond impressively.

Everything that runs this program is shared, donated, recycled or on loan among the students, families, businesses, and service communities of our district.

Attached is a *Science Needs* listing that a Kindergarten-Grade 6 school might distribute throughout the community.

Parent Science Committee

Key to the success of any school program is its parental involvement. Organizing a cadre of parents to meet regularly to discuss needs of this program is a critical component.

A parental committee's agenda might include:

1. Special Events. Parents might pool their telescopes, toilet tissue tubes, projectors and such to put on a Star Party. Anybody who wishes can donate talent to the evening, from expertise to telescopes to making a snack.
2. Fund-Raising. Parents reserve a local roller-skating rink for a family evening of fun. Result: enough money to buy the consumables (i.e. vinegar, baking soda) for the science program for a year)
3. Inventory Update. A bi-weekly listing of inventory is published on what may be needed (i.e. yogurt cups, soda bottles, styrofoam trays). This usually results in a deluge of materials.
4. Teacher Assistance. Parents take on clerical and inventory tasks. Parents have talents that they are delighted to share. It may range from filing papers to doing calligraphy for participants in a science fair/national competition.

All the above-noted activities are currently parent-sponsored in the Mansfield district.

Local businesses (there is no local industry) contribute as well. A hospital provides latex gloves, pipettes. A nursery donates sand, soil and gravel. The local garbage disposal service helps the students organize a schoolwide recycling program. In one unique alliance at Mansfield, the state prison inmates built birdhouses from wood students gathered, then gave the houses back to the children for them to hang in the woods.

Industries do not provide rural districts with the assistance they so urgently need or may have requested. There are no generous grants or sweeping offers of help. JT Baker, Inc. of Phillipsburg, NJ, USA, is one noteworthy exception in the case of Mansfield. Its support of the Mansfield program exemplifies the urgency for those in rural education to nurture the ties within the communities it serves.

Because the parent of one Mansfield student is in a key position in the above-noted company, a vital link exists. Recently, it has meant that Mansfield School has had at its disposal selected personnel and expertise. This in-kind support boosted an effort that resulted in Mansfield's successful competitive bid for enough funds to purchase certain basic technology and experiences. This has allowed the school sufficient time to solidify its conceptual program and make its curriculum operational.

Program Infrastructure

The teacher-coordinator in the science room provides a continuity in the program's implementation. The science room is the hub around which the science program revolves.

The science teacher-coordinator customizes kits to equip teachers for hands-on activities in their classrooms. What has emerged from this process is a mix of techniques suited to the individual teacher's comfort level and expertise. Some teachers need the security of the text and prescriptive experiences. Others create their own design around a set of given concepts. The science teacher-coordinator has the overview of the learning spiral from K-6 and may suggest ways to fulfill the objectives of the curriculum.

Utilization of the science room is at 100%, from Pre-K through Grade 6. Science lab experiences are coordinated with the teachers to blend with the classroom program. The room is equipped exclusively with recycled items, which the students themselves contribute, then reuse. Lessons may be enhanced by a student-operated museum, consisting of specimens contributed by the community.

As noted before, materials that are consumable are purchased through the efforts of our parent science committee. The cost of operating the science program remains at a near-zero cost to the board of education.

Service Site

A space for inventory is necessary. While a space with electric power and running water is preferable, any space that is dry is acceptable. Any existing closet-space may be converted into cubby-spaces by using cardboard boxes with separators. Scrap wood is used to create sturdy shelving.

A local office that is changing its decor donates old file cabinets an entire wall becomes a bank of drawers to store the array of materials. A store that is moving its display cases offers open-shelving; a cabinet maker donates cabinets that were rejected by a customer. The inventory needs of this program are intensive but not expensive. Organization and constant monitoring are essential.

Hands-On Classroom Kits

To facilitate the teaching of hands-on science, teachers request kits of materials needed to conduct experiments in their classrooms. These kits are custom-designed (depending upon the topic under study) by the science coordinator, then sent and kept in the classroom for easy access by the teacher.

These kits are used, then returned to the science room to be refurbished, to be requested by another teacher. Included in these kits are enough materials for an entire module of science. Kits of materials can be contained within one clothesbasket. The inventory is as diverse as the objectives it serves. A prime goal is to make sure there are enough materials for individuals, or groups, as well as to keep the cost minimal, if not zero. For instance, the kit for Grade 2, The World's Oceans, would contain:

plastic bowls
cake pan
stirrers
empty oleo tubs
empty foil tins
popsicle sticks

Sand, pebbles are donated by local businesses. Ice, modelling clay, aquarium, video tape, posters are kept in the lab for circulation upon request. Eggs, salt, plastic cups are considered consumables. Ocean animals in the museum are specimens donated by the community. See attached, The World's Oceans.

Staff Development

Crucial to the success of this program is the willingness of the staff to update, acquire and to strengthen skills for teaching science process skills. The coordinator may opt to reach out on a regular basis by publishing a science newsletter, which among other things, might keep the faculty alerted to inservice opportunities. Choosing to use staff inservice time to model effective techniques, or even traveling together for a day to a field site that students might also use offers teachers a sense of investment. By living the field experience, teachers have a vision of how the skill they may be teaching fits into the overall schemata. If the staff has experienced the field, when a class goes, it is as though the entire student body goes, if only in spirit.

Another technique might include having the science teacher-coordinator assume the responsibility for teaching a selected set of laboratory experiences that the classroom teachers might observe the subtle differences in discovery-oriented learning and teacher-centered classroom operation. It offers the staff a demonstration of learning through facilitating, rather than control.

Student Outreach

To implement an effective program, it is mandatory, once staff is trained, that all students are exposed to the teaming and cooperative learning experiences generated by this set of program objectives. All teachers bring all students to a central location for science experiences suited to that class' needs on a schedule defined by the needs of teachers. At first, classroom teachers observe the model teacher and act as the teacher-helper, moving among the students to inquire, assist, and encourage effort. Gradually the classroom teachers themselves facilitate the experience, with the science teacher-coordinator acting as the auxiliary teacher.

One hundred percent teachers use the customized kits described previously. Teachers might check out any additional materials from the science room, anything from a coffee can to a microscope.

The involvement in science must be inclusive of all segments of the school population with especial attention to minority/female participants.

Older children may be organized into a team of science technicians. These students volunteer free periods, under supervision, to organize, distribute inventory, take-down or set-up laboratory experiences. Their energy is invaluable to the program. Students themselves acquire skills and nurture interests as they perform basic laboratory tasks.

When there is a protracted period of time that school is in recess, there may be an opportunity to conduct a science camp. It might feature hands-on activities, with the intent that science is fun! The outreach for this activity should be schoolwide, albeit voluntary. Older children act as mentors for the younger ones.

Program Assessment

No program that has made successful transition from planning to execution can ignore program assessment. The discovery process affords all students the opportunity to be literate in science. That infers that the assessment must be sensitive to student needs, interests and a wide range of abilities.

A comprehensive plan for assessment includes: (a) assessing content (b) assessing skills, and (c) assessing attitude.

There are several alternative assessments possible:

1. a student journal
2. an open-ended assessment
3. a teaming of students who work through a problem
4. language-based paper/pencil assessment
5. individual performance of selected laboratory tasks

Having an array of tools offer students of all abilities and talents the best opportunity thus far to express their knowledge base.

Keeping a portfolio of selected science experiences for major program components is both meaningful and comprehensive in scope. Students emerge with a document having common criteria to demonstrate student understanding of a total skills spiral. See attached, **About Environment**, etc.

It might feature not only the more formal skills assessments but reflect the work samples of experiences and exposures for the entire span of the science program.

CONCLUSION

The implementation of a program such as is described above is as successful as that which students, teachers, parents and community members have invested. There is a tendency to find new and innovative ways to expand its operation. From its inception, when single class members needed to share the simplest of tools and utensils for hands on, Mansfield students now abound in all the materials they need. Indeed, the community is actively pursuing the addition of a new science laboratory to its educational facility. Lest we forget. The basics of renew, reuse and recycle will prevail.

ABOUT ENVIRONMENTS

Grade 1	Anything that supports the objectives covered in Unit 5, *Our Home The Earth*, Lessons 8-11.
Grade 2	Anything on food chains in Unit 7, *Environments* from T216-T219 or the Opening Activity on T208, that defines the environment at school.
Grade 3	Anything that supports the objectives in Unit 4, *Make-Up of the Earth*, Lesson 3, T145-T151.
Grade 4	T13, Unit 1, *Understanding Weather*, objective about how the sun's energy is absorbed by the earth's surface, or *The Water Cycle*.
Grade 5	T58, Oil Spill, Unit 1, *The Water Planet*
Grade 6	Something from Unit 2, *Renewable Resources*, or T410-T416, Food Chains, Webs, Pyramids, in Unit 8, *Interactions in ecosystems* or something from the JASON Project.

ABOUT THE SCIENTIFIC PROCESS

Grade 1	T80, classifying foods, from Unit 3, Your Senses
Grade 2	T221, sampling a habitat, from Unit 7, Environments
Grade 3	T158 or T164 Investigation 18, classifying rocks, from Unit 4, Makeup of the Earth
Grade 4	Something from classifying/extricating fossils, Unit 2, The Changing Earth or from the trip to Franklin Mineral Museum excavation
Grade 5	T82, sampling of water, level of acidity/basicity from Unit 2,Conserving The Earth's Resources
Grade 6	T387, interaction of abiotic factors to create a physical environment or T431, testing of pH levels in water samples, Unit 8, Interactions in Ecosystems

The World's Oceans

Unit 2

Barbara O'Mara

Feeder/Satellite

Feeder Kit D McPhillips

T46 Lab session or otherwise. Sending salt, two plastic containers. Send for eggs. 24-hour notice, please.

T49 Available as a teacher demo. Sending salt, cake pan. Send to lab for hot plate, ice.

T52 Lab session.

T54 Am sending a model of wave action for you to demonstrate. In grade 5, each student will make his/her own.

T55 Available. Suggest you bring students to the lab to teach this one, as there is sand, pebbles, water here

T56 Ocean globe is available. See me

T61 & 64 Lab session.

T65 Fresh water aquarium in the lab.

T67 Sending a poster you might be able to use. There is a section of a video that you might want to use about underwater exploration.

T70 Available for teams of two; sending salt, cups, stirrers, pie pans.

T73 Pollution pictures and such are available in the lab as may be needed.

SCIENCE ROOM NEEDS

flexible plastic straws
air pump with hose
jigsaw puzzle (easy)
flashlights
hammer
plastic medicine droppers
3-D movie glasses
broom
80 wooden pegs
sandpaper
paraffin
paper cups: 4 & 6 oz.
plastic straws
binoculars
film, self-developing
birdseed
steel wool
10 pr. old glasses, plastic lens
plastic spoons
needles
small clock (glow-in-dark hands)
plastic bags, all sizes
plastic pail (small)
Slinkys
aluminum foil
balloons
hairbrush
packets, unused seeds
gloves
cone-shaped paper cups
popsicle sticks
Hot Wheels cars
clear plastic cups/glasses
bottle opener
blindfolds
no-wax flooring, 3-4 tiles
simple periscope
sunglasses
plastic plates
plastic margarine tubs
bag of potting soil
food coloring
marbles
tennis ball
plastic tape: red, yellow, green
blender (plastic)
hot plates
liquid detergent
small blocks wood (30)
shoe boxes
plastic soda bottles
plastic buckets
penlight
squeeze spray bottles
plastic knives
six-pack plastic rings
paintbrushes
frozen juice cans
old photos, Mansfield Twsp.
feathers
plastic pitcher
stainless steel teaspoons
cheesecloth
Silly Putty
round oatmeal boxes
yogurt cups
chicken bones, clean, dry
plastic measuring cups
ball of string
cheesecloth
garden box
small ball
coffee stirrers
electrical tape
corks
popcorn popper
simple telescope
metal garbage can cover
sponges
clear plastic bottles
clear plastic boxes
bell wire
squeeze bottles
plastic food containers
candles (small)
12 board lengths (16"-18")
cake pans, foil
piepans, foil
cookie trays
aquarium heater
garden trowels
teakettle
rubber spatula
candle holders
globe
baby food jars
plastic wrap
waxed paper
pieces of silk, wool, fur
timers that show seconds
six-pack plastic rings
dip net

CONTRIBUTED PAPERS

THE IMPACT OF SPECIAL NEEDS STUDENTS ON TEACHERS IN THE RURAL AREAS OF BRITISH COLUMBIA

Helen E. Bandy and Wanda A.R. Boyer — Canada

ABSTRACT

Teachers ... lack information concerning the range of special needs, and are often unaware of appropriate teaching techniques, and suitably adapted curriculum materials ... (B.C.T.F., Partnerships for Inclusion, 1992)

The philosophical and practical difficulties of including children with special needs into regular classrooms has become a worldwide phenomenon. In order to make adequate provisions for rural schools and develop relevant teacher education programs, this study was conducted to measure knowledge, attitude towards, and a willingness to learn about children with special needs.

The study found that the majority of rural teachers in British Columbia perceived that both their in-service and pre-service education had inadequately prepared them for the realities of inclusion. The teachers cited: a high percentage of children with special needs in their classrooms, a wide range of disabilities, a grave concern regarding the lack of support services, and a perceived inability to provide optimal educational programs. Repeatedly the teachers reported the implementation of a variety of individualized learning experiences. The study provides several recommendations for teacher education.

INTRODUCTION

Provincial policies have been developed to mandate inclusion which cause pedagogical and organizational problems for school personnel... Teachers are uncertain of how to teach 'special needs' students. They lack information concerning the range of special needs, are often unaware of appropriate teaching techniques... (B.C.Teachers' Federation, 1992)

The philosophical and practical difficulties of including children with special needs in regular classrooms has become a worldwide phenomenon. Two Canadian studies note that classroom teachers lack the confidence to develop appropriate individualized programs and believe they need more knowledge regarding inclusionary practices (B.C. Teachers' Federation, 1992, Greater Victoria Primary Teachers' Association, 1991). Both these surveys explicitly identified inservice needs and the necessity for more extensive collaboration with concerned professionals. Extensive research indicates that although teachers express feelings of inadequacy about teaching students with disabilities they respond positively to inservice programming (Simpson & Myles,1990; Thompson, 1992; Zeph, 1991).

A question arising from the strongly corroborated need for inservice programming is the content of this professional development. Themes which resound throughout the literature (Cross & Frankcombe, 1994; DePaepe & Walega, 1990; Ellis & Graves, 1990; Lewis & Doorlag, 1991; Thompson, 1992; Zeph, 1991) are the need for instructional models, individual educational plans, specific classroom modifications, information processing and cognitive strategies, an improved teaching environment, accessing support services within the school district, and educational cooperation between districts.

In British Columbia the process of delivering professional development is complicated by the rural nature of the province. The population centres are clustered in the Lower Mainland region, southern Vancouver Island and the Okanagan Valley. The rural areas are generally characterized by mountainous terrain and climatic extremes. The problem of access to these rural schools becomes even more critical when inclusion of all pupils in schools is mandatory. *The British Columbia Royal Commission on Education: Summary Report* (1988) has addressed the issue of rural inequality in education, noting that many small schools in remote areas of the province "are located in relative isolation and operate with less than generous resources; and many students, teachers, parents, administrators, and trustees admit a sense of abandonment by central educational authorities" (1988, p. 16).

When discussing the issues of rural schools the term "rural" is examined in at least three different ways according to Bealer, Willits & Kuvelski, 1965:

1. ecological - relating to place of residence with particular attention to population size, density and degree of isolation.
2. occupational – farming versus other occupations.
3. sociocultural – differentiating between attitudes and behaviour in rural and urban communities.

For the purpose of defining rural in B.C. and within this paper distance and degree of isolation are predominant features which must be considered.

The issue of integrating children with special needs into these rural classrooms is of vital import to the preservice and beginning teacher as the majority of students who graduate and receive a Bachelor of Education degree at the three British Columbia universities will begin their teaching careers in small rural schools (Bandy & Boyer, 1994). Therefore, in order to develop relevant teacher education programs, it is important to understand the attitudes, concerns and knowledge of rural teachers toward the inclusion of children with special needs in their classroom (Boyer & Bandy, 1993).

Purpose of the study

The purpose of the study was to survey teachers in rural school districts to determine their knowledge and attitude towards the inclusion of children with special needs in their classrooms. Secondly, the study identified rural teachers' knowledge of and ability to access resources in the school district and their individual schools. The questions addressed in the study include:

1. How do B.C. teachers, in rural schools, define students with special needs?
2. What training have rural teachers received at both the preservice and inservice level to prepare them to teach students with special needs?
3. How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?
4. Do gender, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?
5. What support is available to assist the classroom teacher when integrating special needs students into their rural school?
6. How do rural teachers assess the progress of special needs students in the regular classroom?
7. Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?
8. What teaching strategies do teachers find the most effective for integrating special needs students?
9. What recommendations could be made to rural school districts, the Ministry of Education, and Universities regarding the integration of students with special needs in rural schools?

The study sample

The sample for this study was mainly drawn from teachers currently employed in 29 districts classified by the Ministry of Education as rural/remote. For the most part the sample was drawn from schools with staffs of between two and nine teachers. In a few cases, the sample came from other school districts where there were communities that were relatively remote within the district. The sample included 178 schools in 43 school districts. Questionnaires were distributed to one, two or three teachers within each school depending upon the size of the school. A total of 337 questionnaires were distributed and 121 or 36%, returned completed questionnaires.

Instrumentation

The survey questionnaire was designed with 114 questions segmented into five parts: Present Employment and Personal Data, Students with Special Needs and the Degree of Preservice/Inservice Training, Support Services, Identification and Assessment, and Planning and Adjustment. The instrument was designed to incorporate the priorities identified by a pilot group of rural teachers and student teachers. The questionnaire was mailed to the identified teachers.

Data analysis. All numeric data were transcribed to a computer spreadsheet for analysis. Frequency distributions and percentages were computed. Given the nature of the numeric data, only chi-square tests of statistical significance were used to further explore the data. In some cases the ordinal scale was treated as interval data with calculated means used for the purpose of rank ordering results.

The open-ended responses of all participants were collated and have been used to illuminate the numeric data..

Concern for Ethics. All participants were informed of the purposes of the survey. Participation was voluntary, all responses were anonymous, and no person has been identified by name in the report.

FINDINGS

There were 121 respondents who returned completed questionnaires. Remarks by the respondents showed they were extremely interested in participating in the study and the majority asked to receive a copy of the findings.

Profile of the study group

A profile of the respondents is displayed in Table 1. Of the participants 76% were female and 24% male. Table 1 shows the distribution broken down into primary and intermediate/secondary teachers with only two men at the primary level. The ages of the respondents ranged from less than 25 years to over 53 years with a median age of 40 years. Teachers were asked how long they had been in the school district and in the school. Twenty three percent of the teachers had been in the district for less than 3 years and 34% had been in the school for less than 3 years. Table 1 denotes the average stay in the district was 8 years and the average number of years in their present school was 5 - 6 years. These results show that currently there is a relatively stable teaching population in the rural schools of British Columbia.

Table 1: Profile of the sample

Item	Primary	Intermediate/ Secondary
Distribution by gender	66 women 2 men	26 women 27 men
Average age	41.5 years	40 years
Number of years employed in district	7.7 years	8.0 years
Number of years in school	5.1 years	5.9 years
Teaching certificate		
Standard	18	2
Professional	50	51
Location of school		
Isolated	5	1
Native village	4	4
Community less than 500	36	15
Community less than 1000	9	15
Community less than 5000	14	18
Class Size (average)	18 children	22 children
Number of Special Needs in class) (average	3 special needs	4 special needs

Eighty three percent of the respondents held University degrees and a B.C. Professional Teaching Certificate. The average class size was 18 students in primary grades and 22 students in the other grades. The number of students with special needs ranged from 1 to 10 with an average of 3 - 4 special needs students in a class. Seventy of the respondents were teaching in communities with a population of less than 500.

Research Question one: How do B.C. teachers, in rural schools, define students with special needs?

Respondents were asked for their definition of students with special needs. Table 2 displays the definitions supplied by the teachers. Definitions used by 39 teachers were grouped as 'students who are outside the normal range , they need lots of support, curriculum modifications, and special facilities, human resources involved'. The second most common grouping, 19 teachers, was 'students who are physically, socially, culturally, ethnically, educationally, intellectually below age level,. The various definitions of students with special needs as stated by the teachers were fairly consistent and similar to the guidelines offered by the Ministry of Education. There were some definitions that acknowledged "gifted" as special needs – *A child who is far below or above(2/3 + yrs) where most kids would be* – *and again – differently abled, talented/gifted or physical, mentally unable to function.* Many definitions included comments about inappropriate behaviour. Some added comments further illustrate the teachers' understanding and attitude toward special needs students. One teacher discussed the issue of enabling the other students in the classroom. "a student with special needs is one who needs continuous support (so that) the other students (are able) to progress in a classroom situation".

Many teachers mentioned behaviour problems as well as other special needs.

Table 2: Rural Teachers' Definitions of Children with Special Needs

Definition categories	n =115
Students who are outside the normal range , they need lots of support, curriculum modifications, and special facilities, human resources involved.	39
Students who are physically, socially, culturally, ethnically, educationally, intellectually below age level.	19
A child who is far below or above(2/3 + yrs) where most kids would be	11
Children who need extras in academics (Learning disabled), modifying disruptive/inappropriate behaviour, physical (hearing, vision)	7
Students who are unable to learn (read/math/think/problem solve) or behave socially at normal level	6
I.E.P. , one on one help, or group of 2 or 3 children with similar needs	5
Needing individual or specialized assistance beyond the expertise or time allotment of regular teacher	5
Differently abled, talented/gifted or physical, mentally unable to function	4
Learning Disabled. (visual/audio, perceptual problem), motor deficit, ADHDH, behaviour problems, lacks school experience	4
Learning is severely delayed -Mild mental handicap	3
Extra encouragement, time on behaviour plan, teacher effort to become a responsible class member	3
Physically/mentally unable to handle routines or directions without help	2
Hyperactivity and Fetal Alcohol Syndrome	2
Conspicuous among peers in physical or social skills	2
Emotional problems due to dysfunctional families	1
Dysfunctional, Fetal Alcohol Syndrome, hyperactivity-emotional problems, lack of food	1

One teacher defined a student with special needs as: "someone who has behaviour problems or who is physically handicapped in such a way that it is not easy for him to learn in a regular classroom" while another teacher said, "a child with severe behaviour problems....."

The definitions reveal that the rural teachers are faced with a large diversity of special needs in their classrooms.

Research Question two: What training have rural teachers received both preservice and inservice to prepare them to teach students with special needs?

Teachers were asked to rate on a five point Likert scale their opinion of the adequacy of their preservice and inservice training in preparation for inclusion of various categories of special needs. Mean scores were used to rank order the preservice and inservice components. The mean ratings listed in Table 3 reveal that rural teachers believed that both the preservice and inservice training for all categories were marginal at best. Teachers perceived that they had received slightly more preservice and inservice training for Reading Difficulties (mean 3.16 & 2.97) than for any other type of special needs. Also, teachers perceived that they had received the least preservice and inservice training about working with Tourettes Syndrome. In fact more than 86% of the respondents felt they had inadequate training both preservice and inservice for Tourettes Syndrome and Autism. One area, identified by teachers in their definitions, of particular concern was severe behaviour problems. Yet the teachers felt that the preservice and inservice they received to work with these students was between marginal and inadequate (mean 3.52 & 3.27). Fetal Alcohol syndrome was also identified as a reality in many rural schools. Again the teachers indicated that, in their opinion they had received inadequate training (mean 4.24 & 3.95) about Fetal Alcohol syndrome and effects.

Table 3: Perceived Adequacy of Preservice and Inservice training received by Teachers in Rural Areas in Preparing them to work with various categories of Special Needs

(1 Excellent, 2 Adequate, 3 Marginal, 4 Inadequate, 5 not at all)

Item	Preservice training		Inservice training	
Rating (1........5)	Mean	Rank Order	Mean	Rank Order
Reading Difficulties	3.16	1	2.97	1
Behaviour Disorders	3.52	3	3.27	2
Gifted	3.18	2	3.37	3
Children at Risk	3.59	4	3.41	4
Children with severe Learning Disabilities	3.95	5	3.62	5
Fetal Alcohol Syndrome	4.24	9	3.95	6
Mental Handicaps (TMH)	4.12	7	4.16	7

Hearing Impairments	4.27	11	4.24	8
Physical Handicaps	4.03	6	4.26	9
Visual Impaired	4.26	10	4.26	10
Mental Handicaps (EMH)	4.18	8	4.28	11
Petit Mal/Grand Mal	4.30	13	4.31	12
Chronic Health Impairments	4.28	12	4.40	13
Autism	4.49	14	4.50	14
Tourettes Syndrome	4.64	15	4.61	15

According to these respondents the majority of programs did not adequately address the specific issues of the different types of special needs that teachers might encounter.

Another series of questions asked respondents to indicate on a five point scale whether they agreed or disagreed with statements about the types of preservice and inservice training they received. Table 4 tabulates the responses by percentages. Teachers expressed no consistent responses as to whether their preservice and inservice sessions contained a "grab bag" of hands-on activities. 43% of the teachers agreed that any preservice training that they had received was predominantly theoretical, whereas only 27% perceived that their inservice was mainly theoretical. Inservice programs included both theoretical and practical information regarding special needs students according to 35% of the teachers while 34% disagreed. More teachers perceived that their inservice had introduced them to a variety of materials (34%) than had their preservice (8%). The vast majority of respondents believed that neither their preservice (76%) nor their inservice (42%) had introduced them to a variety of materials.

Further information in Table 4 reveals that teachers believed that they had received little or no instruction in curriculum and methodology for individual educational planning during their preservice education (62%). Fifty percent of the respondents felt that they need more inservice on *instruction in curriculum and methodology for individual educational planning*. Fifty two percent of the respondents had received inservice for working with special needs students less than once a year and only 21% received inservice twice a year.

Table 4: Type of preservice and Inservice received by Teachers working in Rural Schools

Item		Strongly agree %		Neutral		Strongly disagree %
I received a "grab bag" of hands-on strategies for working with Students with Special Needs	Preservice	4.7	16.8	27.1	23.4	28
	Inservice	6.7	28.6	25.7	21.9	17.1
I predominantly received theoretical information regarding Students with Special Needs	Preservice	14.8*	28.7*	22.2	14.8	19.4
	Inservice	6.5	20.6	31.8	29.0	12.1
I received a both theoretical and practical information on Students with Special Needs	Preservice	2.8	16.8	19.6	31.8	29
	Inservice	2.8	32.7*	29.9	20.6	14
I was introduced to a variety of materials and activities to work with Students with Special Needs	Preservice	1.9	6.5	15.7	29.6	46.3
	Inservice	4.7	29	24.3	25.2	16.8
I need more instruction in curriculum and methodology for IEP's	Preservice	49.1*	23.1	19.4	2.8	5.6
	Inservice	44.2*	28.8	21.2	3.8	1.9
I received instruction in curriculum and methodology for IEP's	Preservice	7.3	13.8	16.5	26.6	35.8
I receive in-service at least twice a year for working with Students with Special Needs	Inservice	9.3	12.1	10.3	15.9	52.3
I receive in-service less than once a year for working with Students with Special Needs	Inservice	31.8	20.6	12.1	14	21.5

* *indicates the highest percentages*

The general adaptability and inventiveness of rural teachers may account for several respondents mentioning that they tend to augment their training with their own study and reading. One respondent stated that what she knows about children with special needs is "from Pro-D and workshops and the extra reading I did after University". Another respondent stated "I have done reading on my own and figured out how to adapt my program, but I feel quite isolated".

Research Question three: How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?

Respondents were asked to rate, on a five point Likert-type scale, their success in meeting parental expectations and the needs of exceptional children. For the purpose of this report the categories have been condensed to three categories: (1)*Excellent and very good*, (2) *Good*, and (3) *Moderate and Poor*.

Table 5: Teachers' Perceived Success at Integration and Meeting the Needs of Special Needs children

Item	Excellent/ v.good %	Good	Moderate/ Poor %
Academic needs	24.5	23.6	51.9
Social needs	34.9	31.1	33.9
Emotional needs	33.0	32.1	34.9
Parental expectations	34.0	28.3	37.7
Benefits for Special Needs child	30.4	27.6	41.9
Benefits for the rest of the class	18.1	26.7	55.3

While 34.9% of the respondents felt that they had met the social needs of the special needs students only 24.5% felt they had met the academic needs. Only 18.1% of the teachers perceived that the integration of special needs students into the regular classroom benefitted the rest of the class. One third of the teachers believed they were meeting the parental expectations for the special needs students and that these children did benefit from integration into the classroom (30.4%).

Respondents were asked to rate their level of satisfaction with their ability to effectively integrate special needs children into their class as *Very high, High, Moderately High, Low* and *Very Low*. Only 18% of the teachers were satisfied with their inclusionary practices whereas 43% were very dissatisfied with their ability to effectively integrate the students. As might be expected, upon further analysis it appeared that there was a correlation between the teachers success in meeting the needs of the students and their own level of satisfaction. Because of the small numbers the correlation could not be considered statistically significant. However, each factor provided a higher level of satisfaction for those who perceived they were meeting the needs of the special student successfully compared with those who felt unsuccessful.

The teachers provided further comments that illustrated their feelings graphically. One teacher stated that "I never feel that I am doing enough for those students" and he perceived that he was only meeting their needs at a moderate level. Three other teachers whose level of satisfaction was low stated: "too many children, not enough support in the classroom" ; " for 2 years I had a student with apraxia who was incapable of doing academic work. I feel my attempts at formulating an alternative program were inadequate"; and "the students as well as I get frustrated because their needs are not being met". One teacher who perceived he was meeting the needs of the children and had a very high level of satisfaction explained that the "involvement of all stakeholders - parents, District, School and students. Reasonable expectations for growth & success" was the key to success.

Research Question four: Do gender, size of class, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?

Table 6: Teacher level of satisfaction and factors that make a difference

Factor		High satisfaction %	Moderate satisfaction %	Low satisfaction %	p
Gender	male	18.5	18.5	63	027*
	female	16.9	46.1	37.1	
Class size	<21	23.1	42.3	34.6	165
	> 21	12.5	37.5	50	
Grade level –	primary	27.4	32.3	40.3	012*
	intermediate	6.0	46.0	48.0	
Community size–					
	isolated	19.29	35.08	47/36	768
	>500	16.36	45.45	38.18	
Teacher assistant –					
	available	25.33	44.0	30.66	016*
	seldom available	0	42/86	57.14	

The data provided by the previous questions were further studied with Chi-square analysis. Table 6 shows the analyses. There were statistically significant differences in level of satisfaction for three factors; gender, grade level and the availability of a teaching assistant. Gender did make a difference. 63% of the men expressed a low level of satisfaction with their ability to integrate special needs students whereas only 37.1% of the females expressed a low level of satisfaction. This result might be partially explained by the fact that only two men were teaching the primary grades and grade level also made a difference in level of satisfaction. While 27.4% of the primary teachers claimed a high level of satisfaction only 6% of the teachers of other grades were satisfied with their ability to effectively integrate special needs students. Perhaps at the primary level the social and emotional needs outweigh the academic needs and therefore the ability to integrate children into the classroom is more satisfying.

Research Question five: What support is there available to assist the classroom teacher integrate special needs students into their rural school?

Respondents were asked to state how often they had the assistance of support personnel in their classrooms. The categories for the five point scale were *Daily, Regularly, Sometimes, Seldom, Never*. For the purposes of reporting the categories were collapsed into (1) *Daily*, (2) *Regularly* and *Sometimes*, and, (3)*Seldom* and *Never*. The results are outlined in Table 7 as frequency distributions by percentages.

Teacher assistants were available to more than half the teachers on a daily basis. However, the respondents were not asked to relate whether the assistants were full or part time. A few teachers mentioned that when teacher assistants were available they were untrained members of the community. One factor that was considered most important by the rural teachers and student teachers in the study conducted by Boyer & Bandy (1993) was that full time teacher assistants should be available for "low incident" special needs students. Unfortunately, the present study did not address this issue. As might be expected a nurse, school psychologist, speech and language pathologist, and physiotherapist were not available on a daily basis in the rural schools. Over 50% of the teachers stated that these support personnel were *seldom* or *never* available to them, the only exception was the speech and language pathologist.

Table 7: Support Personnel Available to the Rural Teachers

Availability of Support Personnel	Daily %	Regularly/ Sometimes %	Seldom/ Never %
Teacher assistant	53.4	28	18.2
Nurse	0	31.0	64.5
School psychologist	0	34.2	65.9
Speech and language pathologist	0	58.0	42.0
Physiotherapist	0	22.5	77.5
Child and youth care workers	2.6	33.1	63.2
Home/school coordinator	5.4	23.2	71.5
Learning assistance teacher	24.4	53.8	21.8
Parent volunteers	3.4	39.3	57.2
Community volunteers	0	18.4	81.6

A learning assistance teacher was available daily or regularly for 78% of the teachers though 21.8% seldom or never had a learning assistance teacher in their school. Also, the majority of teachers seldom or never had child and youth care workers (63.2%) or home/school coordinators (71.5%) to support them.

One surprising result was the relatively few parent or community volunteers who were working in classrooms daily (3.4% and 0%). Forty six teachers did have parent volunteers in their classrooms regularly or sometimes. A low percentage of teachers had community volunteers in the classroom (18.4%) sometimes while 81.6% seldom or never had them in their classrooms. A rural school is usually such an integral part of the community that it might be expected that many volunteers would be working on an individual basis with the special needs children.

These results illustrate the low level of support personnel that are available to rural teachers in British Columbia. Funding is an issue, particularly in small schools where the enrolment is low. The teachers' frustrations can be easily understood when it is realized that these rural teachers are often without support from other professionals for their inclusionary efforts.

A District resource team was available in 73.7 % of the schools while a school based resource team was available in 70.2 % of the schools.

The composition of the personnel that comprised the teams varied. In several cases the school based team included the principal or vice-principal, the teacher, the learning assistance teacher and the teacher assistant. However, forty nine teachers stated there was no learning assistant regularly in the school and forty teachers indicated they only sometimes or never had teacher assistants in the classroom. For these teachers the school based team did not existent.

Respondents were asked to rank order the importance of six different responsibilities of the district and school based resource teams. Table 8 lists the responsibilities for each of the teams and the average rank ordering of the responsibilities. Ninety respondents completed the rank ordering for the district team and ninety three for the school based team.

Teachers perceived that the most important responsibility for both district and school based teams was to "*assist the teacher in establishing the most enabling environment for learning*." For the district team the second most important responsibility was to "*make suggestions to modify and adapt teaching style, activities and curriculum for individual pupils*" while for the school based team the second most important responsibility was to "*provide recommendations for improving pupil's instructional program*".

Table 8: Teacher Perceptions of the Importance of Certain Responsibilities of Resource Teams

Responsibilities	District Team mean ranking n=90		School Team mean ranking n=93	
To assist the teacher in establishing the most enabling environment for learning	2.61	1	1.90	1
To make suggestions to modify and adapf teaching style, activities and curriculum for individual pupils	3.09	3	2.79	2
To provide recommendations for improving pupil's instructional program	2.80	2	2.81	3

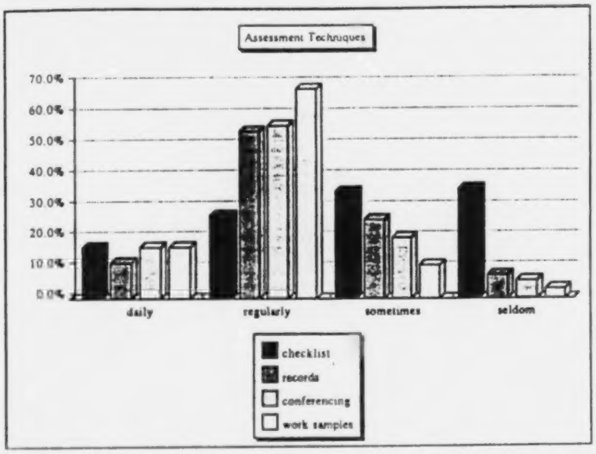
To suggest innovative strategies for the varied learning styles of children in the classroom	3.36	5	3.21	4
To develop a repertoire of conflict management strategies to improve pupil interaction with adults and peers	3.99	6	3.60	5
To help integrate related services: speech, physiotherapy, occupational therapy	3.22	4	4.42	6

The teachers believed that the least important responsibility for the district team was "*to develop a repertoire of conflict management strategies to improve pupil interaction with adults and peers*" and for the school based team was to "*help integrate related services: speech, physiotherapy, occupational therapy*".

On the whole teachers did not rank highly the development of a repertoire of conflict management strategies. Perhaps they distinguished between the in-class aspects of integration and the needs of the individual learner.

Question six. How do rural teachers assess the progress of special needs students in the regular classroom?

Figure 1. Techniques employed by rural teachers to assess the progress of exceptional children.



Respondents were given a list of four assessment techniques and were asked whether they used the techniques (1) *daily*, (2) *regularly*, (3) *sometimes*, and (4) *seldom*. They were also asked to outline other techniques that they used regularly. Figure 1 displays the results.

Of the total number of respondents 1.7% indicated a daily use of checklists and 35.9% indicated that they *seldom* employed developmental checklists to assess individual student progress. Twelve percent indicated *daily use* of observation and routine record keeping while 54.6% employed these techniques *regularly* and 26.1% *sometimes*. Conferences were cited by 16.8% as being a *daily* occurrence while 56.5% of the respondents cited classroom activity as an assessment tool used with regularity. Samples of student work were employed by 16.7% of the respondents on a *daily* basis while 68.3% regularly assessed student progress employing student work samples. The rural teachers profess the regular use of a variety of assessment strategies while closely monitoring the progress of the special needs pupils in their classes.

Research Question seven: Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?

Respondents were provided with thirteen statements with which they were asked to *strongly agree, agree, neutral, disagree and strongly disagree*. For purposes of analysis the five point scale was collapsed to three categories: (1) *strongly agree and agree*, (2) *neutral*, (3) *disagree and strongly disagree*. Table 10 displays the responses by percentage distribution, means and rank ordering. Teachers strongly agreed with the statement that "*Other teachers have provided me with learning materials and resources to assist in planning for individual student needs*". The statement with which the teachers agreed the second most often was "*Other professionals have provided me with learning materials and resources to assist in planning for individual student needs*". The third ranking was given to the statement "*My colleagues have modeled appropriate teaching strategies*". The lowest ranking was given to both statements about University/College instructors and resources, assisting the teachers with background knowledge and materials.

Table 9: The Resources that Teachers Identify as Available to Them for the Implementation of Integration in Their Classrooms

Item	Strongly agree/ agree %	Neutral	Disagree Strongly/ Disagree %	Mean	Rank Order
Other teachers have provided me with learning materials and resources to assist in planning for individual student needs	62.3	21.1	15.6	2.46	1
Other professionals have provided me with learning materials and resources to assist in planning for individual student needs	54.1	27.5	18.3	2.59	2
My colleagues have modeled appropriate teaching strategies	42.9	29.9	27.1	2.87	3
My colleagues have provided guided supervision and support for me to learn new strategies	38.9	32.4	28.7	2.99	4
District Resource Centre has provided learning materials and resources to assist in planning for individual student needs	33.7	29.9	26.5	3.22	5
School Resource personnel have provided guided supervision and support for me to learn new strategies	24.3	38.3	37.4	3.24	6
Parent involvement has assisted me in successfully integrating Students with Special Needs	27.5	32.1	40.4	3.31	7
District Resource personnel have provided guided supervision and support for me to learn new strategies	22.0	28.4	49.5	3.48	8
The District has provided additional release time for me to observe teachers interacting with Students with Special Needs	16.7	22.2	61.1	3.89	9
The Ministry of Education has provided learning materials and resources to assist in planning for individual student needs	12.0	22.9	65.1	3.90	10

Community involvement has assisted me in successfully integrating Students with Special Needs	8.4	23.1	68.5	4.08	11
University /College instructors have provided me with background knowledge in assisting Students with Special Needs	22.9	25.7	51.4	4.18	12
University/College Resource Centre has provided learning materials and resources to assist in planning for individual student needs	4.6	11.1	84.2	4.43	13

To further understand which resources and personnel have assisted the rural teachers the most with their inclusionary efforts, respondents were asked to indicate the level of importance of ten items in helping them with their inclusionary practices. The scale used was five points with (1) great amount. (3) moderate amount. (5) not at all. For purposes of comparing the level of importance the results are tabulated in Table 11 with means and rank order reported. Teachers perceived that the three most important items for them were:

(1) a supportive school administration.

(2) class size.

(3) a good working relationship with the parents of children with Special Needs.

It was noted earlier in this report that class size was one of the factors that made a significant difference in the level of satisfaction that teachers experienced with integrating special needs children in their classroom. Alexander & Bandy (1990) found that a supportive school administration was also a significant factor in the successful acclimatization of first year teachers into B.C. rural schools.

Table 10: Degree of Importance of Several Items that Teachers Perceive would Assist them with Integration

Item that would assist teacher	Mean	Rank order
Supportive school administration	1.56	1
Class size	1.60	2
A good working relationship with the parents of children with Special Needs	1.61	3
Appropriate modified curriculum materials for the classroom	1.99	4
District in-service	2.22	5
Use of technology to assist students with Special Needs	2.29	6
Resource documents that include examples of successful integration practices	2.52	7
Release time to working with the teacher assistant	2.54	8
Summer institutes	2.92	9
Release time to work with the pupil's previous teacher	3.31	10

It is worth noting that teachers perceived that a good working relationship with the parents of children with Special Needs was important to them and yet the majority previously reported that there were seldom parent volunteers in their classrooms.

High on the teachers' list of important items were "Appropriate modified curriculum materials for the classroom" and "District in-service". Both these items have been previously noted as responses to other questions.

The rural teachers perceived that the three least important items to assist them with inclusion were:

(1) Release time to work with the teacher assistant

(2) Summer institutes

(3) Release time to work with the pupil's previous teacher

However, the teachers rated all ten items as of great or moderate importance in assisting them.

Research Question eight: What teaching strategies do teachers find the most effective for integrating special needs students?

Respondents were asked to complete an open-ended question as to which teaching strategies they found effective when working with special needs pupils. Table 12 outlines the teaching strategies that teachers found the most effective when working with special needs children in their classrooms.

The comments from the teachers reveal that teachers in rural B.C. are using many exemplary strategies for working with Special Needs children. The large number of teachers that mentioned one-on-one instruction (30), good behaviour management/established routines/consistency (28), flexibility / innovation/ variety/ open ended activities/role playing/use of manipulatives / concrete experiences (26) are using stellar practices which successfully include students with special needs in their classrooms. However, the low level of satisfaction reported may result more from a lack of confidence than with their teaching ability. As noted in Table 12, teachers described a wide range of strategies from specific programs (Whole language, Distar, Reading Recovery, Phonics) to classroom management techniques (consistency, clear expectations, accurate assessment of needs).

Table 11: Teaching Strategies Perceived as Effective with Special Needs Students

Effective teaching strategies	n=99
Individual attention/ working one on one/attainable tasks	30
Good behaviour management/ established routines / consistency/behavior modification	28
Flexibility / innovation/ variety/ open ended activities/role playing /use of manipulatives / concrete experiences	26
Patience/make use of humour/ developing a positive helping attitude/ empowerment of student/draw on student's strengths/caring	24
Modification of class assignments and academic curriculum/ having choices/ more time/reteach basic lessons	21
Buddy reading/putting student with more able student/ peer coaching	21
Realistic expectations/ accurate assessment of needs and abilities/ objective based/accurate record of progress	20
Small groups/cooperative learning groups/ skills/multi age grouping	19
Structured environment/ lessons/optional strategies (discussion vs written tests) valuing oral work as well as written/quiet working area/ time out/separate work space	19
Fostering understanding and support/ build self esteem/ personal relationship/regularly praise and reward positive behaviour	18
Whole language/strategies for improving reading level/lots of oral work/use of a computer for student/ use of technology	15
Parental support that is realistic/parental involvement/home-school communication/ team planning including parents/work with support system	15
Assistant working with the student/ good rapport with T.A.	11
Speak slowly and firmly/ clear concise instructions/ repeat directions	7
Routine charts and bulletin boards/ visual aids/ tapings	6
Distar/ Reading recovery program/writing strategies/ writers workshop	6
Talking with class about special needs student/class discussions	6
Conflict resolution skills for behaviour/strategies	3

Other strategies included:

— make use of sharing time
— enlisting whole school in helping
— learn story telling

— try to use all modalities/ learning styles
— book with a tape for reading
— honesty – no hidden agendas
— problem solving team meeting
— visual cueing
— school based team going to inservice together
— teacher release time to work with student
— ask for help if you need it
— work with support system
— teach the thought processes
— School based team share responsibilities
— more time to complete assignments
— attention to all goal areas
— give warning of changes that may disrupt a routine
— training for paraprofessionals

The teachers commented on curriculum modifications that they believe are necessary such as modification of class assignments, open ended activities, use of manipulatives, reteaching basic lessons. The comments reflect an overwhelming feeling of caring teachers who want to build the students' self-esteem, and create a supportive environment for all the children in their class.

Teachers gave some further comments which illustrate the variety of situations in rural British Columbia:

> "I am a rural primary teacher with 11 native students and 1 non-native. 6 out of 12 of my students qualify for learning assistance and at least one requires professional counseling. Our school has no L.A. teacher. Our "teachers' assistants" are unqualified members of the community"

and again

> "Our school is a 2 hour drive away from the school board office – resources are not at our fingertips. Our community has no library resources of any kind. Fetal alcohol effects or syndrome is common in our student population – I have no training for these.

My students often have a non-literate background and some parents are illiterate. My techniques for [illegible]ping the students all revolve around building relationship w[illegible]hem as individuals. I find that until I deal with self esteem and self discipline problems I cannot begin to tackle academic problems."

Another teacher reported on the effect that students with behaviour problems have on the rest of the class and the need for adequate funding:

> "I think normal kids get fed up waiting for behaviour problems to subside. A lot of learning time is lost because of dealing with 1 or 2 or more behaviour problems. Some kids see the "problem" as always getting the attention and may over time resent that child".
>
> There should be..."support for teachers (inservice) and materials all of which cost money. Post secondary training should focus more on strategies"

Only one teacher reported a definite negative attitude toward the inclusion of Special Needs children:

> "The best by far is special classrooms for:
>
> a) behaviour disturbed
>
> b) slow learners
>
> so that each group can be taught at a rate and approach suitable for them. Physically handicapped but otherwise capable students should be integrated into regular classes along with the aids they need to manage"

One teacher felt that the small rural schools often can provide a safe supportive environment necessary for Special Needs children more easily than a large urban school:

> "As our school is small, the staff works together with behaviour problems. We agree on consequences, discuss strategies, and all take a concerned part. Thus classroom and playground behaviours are monitored consistently."

Discussion and Recommendations

Within this paper we have examined the responses of rural teachers to the major question: How do you academically and emotionally, and educationally respond to students with special needs in your classroom? Historically, rural schools have accommodated many pupils with special needs. However, in B.C. within recent years it has been mandated that all children have the right to be educated in the regular classroom. This new era has placed an extra burden on small schools with limited resource personnel. Teachers are required to change their teaching repertoire to more adequately accommodate the whole range of learner needs. The multi-aged family grouping of rural schools may assist in the change process.

> Processes of change in the form of restructuring, reculturing, collaborating and the like are extremely important things that professionals and policy makers need to understand and address. But attention to the change process should never be allowed to detract from or displace the paramount importance of change purpose and change substance - of what the change process is for! (Hargreaves, 1994, p.260).

Rural teachers have acknowledged "change" as a means of promoting successsful inclusion for children with special needs. The important task now will be to "identify, assess and portray a range of restructuring models to create menus of choice for educators to adapt in their own settings, rather than mandates of imposition with which they must comply, whatever their circumstances" (Hargreaves, 1994, p. 261).

For the purposes of this paper, discussion and recommendation are organized by the overall objectives of the study with recommendations outlined where applicable.

Question one: How do B.C. teachers, in rural schools, define students with special needs?

The rural teachers' responses suggest that they are faced with a large diversity of special needs in their classrooms. According to the respondents, positive productive inclusion is more likely to occur if: (1) there is administrative and personnel support and (2) all the children in the classrooms are permitted and not prevented from learning as a result of the inclusionary practices.

Question two: What training have rural teachers received at both the preservice and inservice level to prepare them to teach students with special needs?

This question brought to light that the respondents believed that neither preservice nor inservice experiences introduced them to materials and activities appropriate to educating children with special needs. Both the BCTF and Cross & Frankcombe (1994) are presently compiling resource materials and activities for teachers to use with special needs students. A focus for future district inservice could possibly be access to some of these materials.

Furthermore, when contemplating the issues of preservice and inservice education for rural teachers the characteristics of the teachers who work in the rural environment should be considered. Bandy & Gleadow (1980) found that teachers who came from a rural background were more inclined to teach in rural schools of British Columbia and to meet the needs of rural children and the community. Similarly, Storey (1992) found that 51.2% of the rural teachers came from a rural background. In 1977, Sher noted that "the best rural teachers are the ones who are able to cope with sparcity, utilize community resources, invent curricular materials, and, above all, are oriented to teaching children rather than subjects" (p.287). Thus one preservice/inservice option might be to identify and assist those who are less accustomed to the rural milieu.

Question three: How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?

There was a strong correlation between teacher success in meeting the needs of the students and their own level of job satisfaction. Hargreaves (1994) recommends a 'moving mosaic' with "blurred boundaries, overlapping categories and membership, and flexible, dynamic [and] responsive planning" (p. 238). Teacher generated team planning and team teaching within rural schools, across grades, across districts may provide teachers with the flexibility, risk-taking and continuous improvement which are an essential part of a fulfilling professional life

Question four Do gender, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?

According to the responses to this question primary teachers claimed a higher level of satisfaction with their ability to effectively integrate students with special needs into their classes than did teachers at other grade levels. The question which arises from these comments is how to make the experience of integrating children in the lower and upper intermediate grades more satisfying for teachers Sharing of strategies across grade levels might stimulate open discussion and free teachers from entrenched patterns of behaviour when dealing with older students with special needs Perhaps the proliferation of monographs on special 'tips and methods' (Hill, 1993) can be shared across grades. The 'tips' could possibly stimulate positive results with students and positive attitudes among staff members Collegiality among rural teachers and rural communities can encourage debate, discussion, and development within and among many school districts

Question five What support is available to assist the classroom teacher when integrating special needs students into their rural school?

The responses to this question highlighted the low percentage of parent and community volunteers in the classroom Strategies for promoting, utilizing, and capitalizing on the varied knowledge and wisdom of community members can come in the form of varied innovations such as the active perpetuation of the Community school philosophy

Question six: How do rural teachers assess the progress of special needs students in the regular classroom?

Assessment and monitoring of pupil progress were part of the rural teachers' daily routine. However, teachers perceived an isolation from other professionals who could assist them with the identification and assessment of special needs pupils To overcome this feeling of isolation is a challenge for all rural school districts. Distance and inaccessibility have long been the norm in British Columbia rural schools. With the advent of modern technology, it should be possible to implement some innovative networking

Question seven Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?

The respondents perceived that other teachers and other professionals had helped them the most with their inclusionary practices. The data from this question reveal important considerations for inservice programs. The model of peer coaching appears to be a viable alternative for rural teachers. Teachers helping teachers is the basis of Goodlad's *A Place Called School* It has long been recognized that mentorship is highly successful for not only increasing knowledge but also for implementation of new teaching strategies (Showers, 1988). One aspect that was surprising, given the usual close relationship of rural schools and their communities, was the lack of perceived community involvement with the successful integration of special needs students This is perhaps another resource that should be addressed by inservice programs

Question eight: What teaching strategies do teachers find the most effective for integrating special needs students?

The response to this question is a celebration of the knowledge, wisdom, and credibility of professionals in the rural schools of British Columbia Teachers are using stellar teaching strategies when integrating pupils with special needs into their classrooms McTaggart (1989) indicates that stellar accomplishments must be recognized if we are to support rather than undermine the confidence of teachers in B C

Question nine What recommendations could be made to rural school districts, the Ministry of Education, and Universities regarding the integration of students with special needs in rural schools?

Perhaps the most important role for school districts, Ministry of Education and Universities is the dissemination of resource materials and the inauguration of a networking system within the rural community

CONCLUSION

This study provides some glimpses into the world of rural teachers as they struggle with the inclusion of all children into their classrooms The diversity of the situations and the dedication of the teachers are strengths in B C 's rural educational scene The present stable teacher population provides an excellent opportunity for school districts to implement long range programs to assist teachers with their students

This study singularly discusses rural teachers' experiences making no comparisons with urban teachers Future research should be directed at a broader segment of the teaching profession However, given the unique, adaptable nature of the small rural schools and their dedicated teachers, it may be that these teachers are ideally situated to contribute to the overall knowledge about successful integration of children with special needs

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TELEMATICS IN PRE-SERVICE EDUCATION

Colin Boylan – Australia

ABSTRACT

The preparation of teachers to teach in rural New South Wales schools and Distance Education Centres (DECs) has been included as part of the pre-service program at Charles Sturt University. This paper examines the content of instruction, the use of telematics equipment and the outcomes of the program as identified by pre-service primary and secondary students.

INTRODUCTION

Preparing teachers for rural school appointments through including courses in their pre-service program that examine issues about rural lifestyles, community participation, and provide opportunities for multigrade and rural practice teaching experiences have been identified as an important teacher recruitment strategies for rural schools (Watson, et al, 1986; Smith-Davis, 1989; Cross and Murphy, 1990; Luft, 1992). One research outcome from these studies suggests that when students are provided with these components in their pre-service courses their preparedness to seek and/or accept a rural appointment is enhanced.

Audio conferencing via radio has been used for teaching in distance education. The Schools of the Air have pioneered the use of interactive radio for tutorials in remote rural parts of Australia. With the increasing availability of microcomputers and linking of computers with each other, another communication channel has been added to the static print and interactive voice used in School of the Air broadcasts to deliver distance education to isolated students, known as telematics. Telematics or audiographic teleteaching (Barker, 1990) relies on connecting a number of remote sites simultaneously through using existing telephone lines.

Teacher Education at Charles Sturt University

Staff from the Rural Education Research and Teaching Unit within the Faculty of Education have developed a number of pre-service courses for elementary and secondary teachers which incorporate those attributes identified above. In particular students engage in theoretical and practical studies of:

i) rural communities and the school-community relationship;

ii) roles and expectations of teachers in rural settings;

iii) multigrade organisational and teaching strategies;

iv) practice teaching experiences in small rural schools (Smith, 1988).

Charles Sturt University is a multi-campus university serving the tertiary needs of students from inland New South Wales. Teacher education courses are offered on the Wagga Wagga campus and the Bathurst campus which are 300 kilometres apart.

Technological Change and Rural Schools

Over the past five years, significant changes in the possible modes of delivery of education into rural New South Wales schools have occurred. Development and improvement of communication technologies have brought rural schools to the forefront of educational provision. Barker (1990) has categorised the range of tele-communication distance education technologies used by schools into three types based on delivery mode:

i) audiographic teleteaching;

ii) satellite TV teaching; and

iii) two-way TV instruction.

Barker (1990) and Boylan and Hemmings (1992) have analysed the relative strengths and weaknesses of each form of delivery and concluded that there is no one best method of delivery. Rather, they argued each approach may be the most appropriate for one group of schools given the range of financial, educational, and community based considerations that occur.

In the New South Wales education system, communication technologies have been trialled in clusters of rural schools since 1990 (Metherell, 1989). The primary form of communications technology used has been telematics.

The telematics distance education system involves the use of three components:

i) *the voice link –*
a loud speaker conferencing telephone. At the beginning of each lesson the teacher dials the schools' telematics classroom teleconferencing system numbers where her students are located, and establishes voice contact. Then she can talk to all students and they can respond to her, or to any other student in the extended classroom;

ii) *the computer link –*
a Macintosh computer running an electronic whiteboard software known as Electronic Classroom (Crago, 1993). Once the audio link is established, the teacher dials the other schools' computers from her own computer and links them into the network where any action on her computer screen is mirrored at the other locations. She can also give control of the computer network to any other site have the students display their work to all connected sites; and

iii) *the document link –*
a facsimile machine. Both the teacher and the students use the facsimile machine to send assignments, work programs or individual inquiries to each other.

Boylan (1992), Walker and Boylan (1992) and Squires and Sinclair (1993) have documented the impact of telematics on small rural central (K-12) schools in New South Wales. They have identified how teachers have modified teaching strategies, increased curriculum diversity and choice for students, and improved participation and retention of students to the end of secondary education (Year 12).

In 1990 the New South Wales Department of School Education began trialling telematics in ten small rural K-12 schools divided into two clusters. The trial extended over three years and was subject to an external evaluation in 1992. In their evaluation report, Squires and Sinclair (1993) concluded that the telematics program was a success. Teachers, students, parents and community members were pleased with the provision, organisation, operation and outcomes of the telematics program.

Two important policy decisions resulted from the evaluation were: i) support for the continuation of telematics in the ten schools, and ii) the extension of telematics into other clusters of rural schools as part of the normal range of delivery modes of education.

Telematics in the Pre-Service Course

These policy decisions set the context and the challenge for teacher education staff at Charles Sturt University to examine their current practices in their rural education subjects. The major outcome of this examination was to incorporate an innovative component into the pre-service education courses where instruction on and about telematics together with providing opportunities for students to use the telematics between the two campuses was provided.

This innovation represented the first systematic inclusion of telematics within any pre-service teacher education course in New South Wales. The program covered practical activities and reflective experiences that sought to develop student competence in and understanding of:

i) the operation of the three components used in telematics;

ii) the analysis of methods of planning, preparing and teaching via telematics; and

iii) the delivery of practical teaching sessions between students located on each campus.

During the second semester of 1993, this program was implemented with 120 final year elementary education students from both campuses. This program represented approximately one quarter of the content of the rural education subject being studied by these students.

Student Reactions

As part of this innovation, student responses were sought on:

i) the operation of the equipment;

ii) the strengths and weaknesses of the mode of delivery; and

iii) their experiences of teaching via telematics.

A questionnaire consisting of nine questions was administered to all students. Five questions sought likert scale responses to statements about the operation of the equipment, its importance in teaching, and the value of learning about telematics in their course of studies. The remaining four questions were free response items dealing with advantages/disadvantages of telematics, prior experiences with telematics, and suggestions for improvement of telematics teaching. A response rate of 59% was achieved (N = 71).

Overall, students responded to the telematics innovation very positively. For the majority of students (100%, N = 71), this was their first exposure to telematics. Students were asked to respond to a series of items on the ease of operation of the equipment where 1 = very easy, 6 = very difficult. Responses to items concerning the operation of each component revealed that the voice link had a mean value of 1.64 (s.d. = 0.96), the computer link's mean value was 2.36 (s.d. = 0.96) and the document link's mean value was 2.52 (s.d. = 1.39). Overall, these findings indicated that the technology was perceived to be easy to use.

A series of questions sought student perceptions of the degree of importance to their teacher education of:

i) verbal telecommunications between lecturing staff and students, and between students; and

ii) computer based graphical communications.

A six point likert scale was used to record responses (1 = not at all important, 6 = extremely important). In Table 1 student responses are presented. The relative importance column was calculated by combining the three 'important' categories (values = 4, 5, 6) into one precentage figure.

TABLE 1: Student Responses

Item	Relative Importance (%)	Mean Response	Standard Deviation
• Listening to lecturer	69	4.42	1.41
• Talking with other students	85	4.87	1.25
• Discussion with other students within my own group	73	4.57	1.27
• Discussion with other students via telematics	76	4.70	1.37
• Communication by text on computer	82	4.89	1.20
• Communication by computer graphics	89	4.92	0.97

These results indicate that students valued the experience of being engaged in live telecommunication links, especially where this gave them the opportunity to interact with students on the distant campus by voice, by text-on-screen, or by using graphics.

Students were invited to provide written comments on the advantages and disadvantages of telematics. 56 students (79%) provided many comments to these questions.

A total of 86 comments dealt with the advantages of telematics. The more frequently listed comments identified by the students were categorised:

- it is a good way of providing education for isolated students (26%)

  eg. *'being able to provide students in rural areas opportunities to study a variety of subjects'* ;

- it improves communication between teacher and students (20%)

  eg. *'excellent form of communication'* ;

- it provides access to curriculum areas not locally available (14%)

  eg. *'it offers a wide choice of subjects to students disadvantaged by distance'*; and

- it develops computer/technology skills in the students (9%)

  eg. *'become technology literate students'*.

62 comments dealing with the disadvantages of telematics were identified by the students which included:

- the lack of face to face contact with students being taught (40%)

  eg. *'can't see the other person' 'no eye contact, hard to control behaviour'*;

- technical problems (18%)

  eg. *'telephone line dropping out' 'fax link problems'* ;

- the preparation of lessons was time consuming (13%)

  eg. *'takes time (a lot) to prepare a lesson'* ; and

- the difficulty in drawing accurately on the graphics tablet (10%)

  eg. *'you need a lot of practice in order to draw competently on the Kurta Pad'*.

From these comments, it is evident that the pre-service teachers were able to see the benefits of using telematics in rural schools to provide greater curriculum diversity, yet they were also aware of the additional demands (preparatory and technical) that using this form of delivery placed upon teachers.

Finally, students were asked to respond to two items that sought their overall reactions to telematics in their course. The first question sought their overall rating of telematics as a means of distance education delivery on a six point likert scale (1 = no potential, 6 = a lot of potential). The students' mean rating was 5.52 (s.d. = 1.02). 86% of the students stated that telematics had considerable potential. The second question asked students to indicate the views on the appropriateness of the amount of class time spent on telematics (currently 10 hours). 59% of students indicated that this amount of time should be increased. 38% indicated it should remain as it is and 3.1% indicated that less time should be spent on telematics.

These findings suggest that students have found the inclusion of instruction on and practice with telematics a worthwhile innovation in their rural education subject.

Future Plans

The teadcher education staff have been encouraged by the response of the students and plan to make telematics an integral component of our rural education subjects. Further, plans to introduce telematics into our secondary pre-service program in 1994 have commenced. A number of rural central schools within the regions served by Charles Sturt University are already part of telematics clusters. There is potential for students of the University to:

- undertake practice teaching sessions in these schools, including the experience of delivering lessons telematically to pupils in other schools in the cluster; and
- using equipment at the University to deliver or participate in lessons which are part of the normal program offered across the telematics cluster. That is, the students,will be able to participate without leaving the University campus.

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RURAL SCHOOLING AND EDUCATIONAL DISADVANTAGE: A CASE STUDY

Elizabeth Hatton — Australia

ABSTRACT

Educational disadvantage should not be taken for granted as an inevitable outcome of schooling for rural children. Schools need not function as mere agencies of social and cultural reproduction. Governments have recognised the fact of rural disadvantage through policy, extra staff and social justice funding. If, for example, schools use funding and extra staff productively, outcomes might be more equitable. This paper is based on a year long ethnographic study of a small primary school in northern New South Wales. Rural location, combined with factors such as poverty and historically entrenched racism, make the school a site in which educational disadvantage is likely. However, staff have the potential to address educational disadvantage given the control they now exercise over educational decision-making under devolved structures and given that the school has available extra staff and financial resources. The paper reports the relative success of the school in redressing disadvantage by identifying both current school level policies and practices which are aimed at social transformation as well as significant areas of oversight which are likely to undermine such efforts.

Rural Schooling and Educational Disadvantage: A Case StudyHenry (1989, p. 1) says 'students in rural areas face serious problems in achieving equality of opportunity in education or employment'. Historically, Australian education has produced unequal outcomes for identifiable social groups. Thus Connell (1990, p. 7) says there is a 'mass of evidence to show that children of the disadvantaged get the worse deal from our education system, and that the children of the advantaged get the best deal'. However not all rural children are educationally disadvantaged. Rural location is unlikely, on its own, to produce inequities of the kind typically cited in the literature on rural disadvantage. (See also Williams, 1987, p. X1X.) Where educational disadvantage is present, factors such as social class, gender and ethnicity may interact with regional location and educational structures to produce disadvantage.

It should not be taken for granted, however, that an inevitable outcome of schooling for disadvantaged rural children is educational disadvantage. Schools need not function as mere agencies of social and cultural reproduction. Primary schooling, in particular, may be crucial in ensuring socially just outcomes. For example, if schools can ensure rural students' early literacy and numeracy skills are of a reasonable standard, students would perhaps, despite the limitations imposed by geography, be better placed to complete secondary schooling and take advantage of tertiary schooling. Governments have recognised the fact of rural disadvantage through policy (see, for example, NSW Department of Education, 1989, Rural Schools Plan), the provision of extra staff (such as Aboriginal Education Assistants) and funding (for example, Isolated Schools).

This paper is drawn from a year-long ethnographic study[1] of a small, rural, state primary school which examines, inter alia, how it functions to transform or reproduce existing social and cultural relations. The study is based in a town called Meiki,[2] in northern New South Wales which has a population of 850 Aboriginal and non Aboriginal (mainly Anglo Australian) people. Aboriginal people originally lived out of town on a mission. The mission school closed in 1950 and those who were the first students group to attend Meiki school recall it as a frightening, traumatic event given their former apartheid-like isolation from non Aboriginal people. The communities remain divided. School personnel have to mediate tensions between them, as best they can, when they surface within the school.

The community is impoverished. Approximately 75 per cent of the population is unemployed. However, amongst Aborigines the rate is as high as 95 per cent. The town has not always been small and impoverished; it was once a thriving mining town.[3] There has, however, been no alternative local source of work for the community since the final shut-down of mining operations seven years ago.

Connell (1993, p. 1) claims that 'children from poor families are generally speaking, the least successful by conventional measures and the hardest to teach by conventional methods'. However, in the context of devolved educational structures teachers should be more able to take advantage of extra staff and of financial resources available to the school to redress educational disadvantage.[4] This paper describes the more significant of Meiki's programs[5] and evaluates the success of the school in educating for social transformation rather than social reproduction.

In what follows I (i) briefly describe the state context which has provided the school with freedom to respond to local problems and given them a planning framework in which their social justice initiatives are integrated; (ii) draw attention to the distinctive nature of Meiki, including its eligibility for social justice funding and extra resources; (iii) describe Meiki's school-based initiatives aimed at redressing educational disadvantage; (iv) evaluate the relative success of these initiatives in achieving social transformation; and, (v) indicate areas of oversight in the school's initiatives which potentially have socially reproductive consequences. The paper concludes by arguing that the socially reproductive consequences of entrenched racism and sexism need to be systematically addressed if the school's achievements in educating students are not to be later undermined.

THE STATE CONTEXT: DEVOLVED PLANNING

In June 1989 the NSW Department of Education launched its schools renewal strategy (Scott, 1989), devolving planning to schools on the assumption that 'principals and their staff are in the best position to decide how to respond to the educational needs of their students' (Scott, 1989, p.10). Each school, within the 'framework of overall departmental goals', is required to 'develop its own Renewal Plan as the basis for its on-going program of school improvement and professional development' (Scott, 1989, p. 10). The Renewal Plan, now known as the Strategic Plan, is 'a simple document outlining a program of action for achieving the school's agreed goals and priorities over five years'. Devolved planning gives more power to NSW schools to plan appropriately for given contexts than they have previously had.

Meiki takes strategic planning seriously. It is a collegial, collaborative venture in which all staff, and some parents,[6] participate. Strategic planning not only ensures that endeavours in the school are co-ordinated but also has the effect of ensuring staff commitment to the plans (Hatton, 1994).

SPECIAL CHARACTERISTICS OF THE SCHOOL

Meiki was established in 1874. It is the only school in town and caters for 136 to 140 local children one third of whom are Aboriginal. The school has an unenviable, stigmatised reputation which seems to be strongly connected to the fact of the Aboriginal population.

Meiki Primary School is classified as second least desirable type of location to which teachers can be transferred in NSW. It is a (P5) disadvantaged school. with a teaching staff of nine including a teaching principal who teaches Years 5/6, an advanced skill teacher (AST) who teaches Years 4/5, an executive teacher (ET) who teaches Years 2/3, two teachers who take the morning and afternoon sessions of Year 1 and also perform other teaching tasks, a kindergarten teacher, an IM (intellectually moderately handicapped) teacher who works in the morning with 8 students who integrate in regular classrooms each afternoon and an Aboriginal Education Resource Teacher (AERT). There is another teacher who comes to the school one day a week. There are also three aides, a Teacher Aide Special an Aboriginal Education Assistant (AEA) who works in closely with the AERT and a Pupil Parent Support aide (PPS). All staff except the AEA and the principal are female. Both the AEA and the PPS aide are Aboriginal.

The AERT's position is an extra staff resource given to the school on a short-term basis by the Department of School Education to assist in developing the literacy skills of Aboriginal students in K-2 through the Aboriginal Early Language Development Program (AELDP). The AEA's position is also an extra state provided resource which recognises the special needs of the Aboriginal student population. The PPS aide's position is funded by Priority Schools Funding which is

> Special funding because they consider we're a school in need of extra attention because of our low achievement levels. I guess. So they ... give us money to run special programs in the school to hopefully catch up the academic deficiencies in the school (Principal).

Currently, the PPS works with Years 3, 4/5 and 5/6 for one hour a day and gives individual help to students with speech problems.

The racial divisions in the community contribute to complexities in school management. Instead of simply relating to a one parent group

> in ... Meiki you've got an AECG [Aboriginal Education Consultative Group] and a P&C [Parents and Citizens Committee], and both of those tend to operate very independently of each other, so you need to work with both sets of committees ... And they're both very sensitive. You need to be seen to be spending time with both groups, socialising, and getting on side with them (Principal).

The school has a history in which the quality of home-school relations varies according to the preferences and style of the incumbent principal. Relations with the Aboriginal community have not always been as productive as they currently are. Indeed, some previous regimes have virtually ignored the Aboriginal community or have become frustrated by patterns of organisation used by Aboriginal people, including operating on 'Koorie time', and have given up on Aboriginal community involvement.

In addition to its base operating grant, the school has access to a number of sources of social justice funding. Currently the school receives the following 'tied' (to be spent as per submission) sources funding: (i) DEET funding under the Aboriginal Students Support Parent Awareness (ASSPA) program of $200 for each Aboriginal student in the school ($9000 per year); (ii) Priority School funding for a Pupil Parent Support (Aboriginal) teachers aide ($9000) ; and, (III) DSP funding ($12000). In addition, the school also benefits from non-tied Isolated Schools funding ($8 600).

MEIKI'S INITIATIVES

Homework Centre

One of the characteristics of the school is a focus on both the academic and social needs of its students. The Homework Centre initiative typifies this. The centre, funded through DEET under the Aboriginal Tutorial Assistance Scheme, is open to all students for two afternoons a week from 3.15 pm to 5. 15 pm. The program is co-ordinated by a member of the Aboriginal community and some of Meiki's staff are tutors. This program, which is available to all students, involves a supervised play period, afternoon tea and individualised tutoring. At the conclusion of the program, children are taken home by bus.

Discipline

While discipline is not specifically linked to extra resources provided by the state or social justice funding, it is central to what has been achieved in the school. Successive principals have viewed discipline as a significant problem within the school and attempted to address the issue, however, their approaches either disempowered teachers by concentrating all disciplinary power in the principal or left teachers feeling ill-equipped

> [without] all the support mechanisms in hand, we didn't have our charts, there wasn't a visible form that the kids could see ... but there was nothing in black and white, like we have with our policy now ... and it was individual interpretation I guess as to whether you got a cross or whether you got a tick and there was variations between teachers (AST).[7]

Concern about violence in the playground and the cost to teaching time incurred by constant disciplinary infractions, together with the current principal's desire to empower teachers in matters of discipline, motivated the school to readdress the issue of discipline in late 1992. The current policy was formulated in conjunction with staff, parents and students following a School Development Day which was attended by parents and staff from the local high school. The draft policy was presented to the AECG and the P&C. Both organisations endorsed its introduction into the school. 1993 was the first full year of operation.

The policy involves a three step procedure: first, students receive an 'on the run' warning; second, if necessary, the use of a classroom technique (e.g. removal to another seat); third, if the behaviour persists, the student gains a Teacher Record of Misdemeanour (TROM) entry which details the date, the name of the student, the category of misdemeanour and the teacher involved. Four escalating categories are employed with clearly delineated behaviours in each category. All children begin on Level A. The negative levels extend from Level B where children gain 5 days of lunchtime detention and lose the right to gain positive awards which is reached by gaining five Category 1 TROM entries in a fortnight, to Level E where expulsion is the consequence which is reached either by getting three Category 1 misdemeanours while on Level D or one Category 4. The positive levels are Bronze, Silver and Gold. Material and symbolic rewards are given as children progress upward. Each classroom charts students' progress.

Literacy

An over-riding objective of Meiki is to ensure high levels of numeracy and literacy amongst the students. Given the economically depressed local area, the school believes that it is essential that the students are literate and numerate if they are to have a chance in life. Literacy is the major area of concern since it is argued that to do mathematics well demands good literacy levels.

A Reading Recovery program, based on the work of Marie Clay, is a major initiative in the school. Reading Recovery is an early intervention program delivered to Year 1 children after testing at the end of Kindergarten. Reading Recovery does not replace, but operates alongside, class programs. The idea is that children who are having difficulty in reading and writing have extra individualised assistance for half an hour a day for a maximum period of twenty weeks. This brings them quickly to average levels of achievement. The morning Year 1 teacher and the IM teacher both contribute to the Reading Recovery program in the school. During 1993, 18 of the Year 1 students benefited from it. Only one Aboriginal child is judged not to have progressed as well as he might and he now receives one-on-one assistance from the AEA and is currently judged to be making satisfactory progress. The level of commitment to the policy of early intervention is evidenced by all teachers forgoing some weekly classroom release time to assist financing the training of Reading Recovery specialists.

Another key strategy utilised by the school is a concentration of resources which enables significant individual attention to every child's language development in K-3. The school takes advantage of special extra staff resources available to it through the Department such as the AERT and the AEA, and extra staff resources available to it through social justice funding such as PPS aide to concentrate on teaching literacy. In the Kindergarten, Year 1 and the Year 2/3 classes, there are no less than four staff working with students for an hour each day. Given the resultant pupil teacher ratio, there is ample opportunity daily for group language development through discussion, direct teaching and guided reading and for individual assistance with reading and writing. The school works on the philosophy that successful early intervention prevents problems in later grades, so in Years 4/5 and 5/6, there is less assistance available, however, the PPS aide assists Year 4/5 with language and Year 6/7 with mathematics for an hour a day.

The contribution made by the AERT and the AEA in K-3 is part of the Aboriginal Early Language Development Program (AELDP). These staff also participate in a variety of other activities beyond the literacy work described above all of which are aimed at ensuring that Aboriginal students achieve at levels commensurate with their non-Aboriginal peers. They have responsibility for ensuring that an Aboriginal perspective is brought to materials and resources used in language development. For example, the AERT and the AEA recently organised members of the Aboriginal community to paint pages for a book to be used in Kindergarten to Year 2 about an important sacred site in the area. Liaison with the Aboriginal community is another crucial aspect of the AERT's and the AEA's role. They take examples of children's work into the community and encourage the participation of parents and community members in the curriculum. Finally, they work with teachers to foster awareness of the need to develop appropriate curriculum and pedagogy.

EVALUATION OF MEIKI'S INITIATIVES

Homework Centre

While it is not possible to say whether this program makes a direct contribution to academic outcomes at Meiki, wider research evidence suggests this initiative is important and probably does. The evidence is that homework makes a difference in academic achievement (Strother, 1985; Toomey, 1985; Keith, 1992). There is also Australian evidence that school homework is typically not given to those students who would appear to stand in greatest need of it (Toomey, 1985, p. 6). Meiki reverses this trend and makes conditions available for its students to successfully complete homework.

Discipline

The discipline policy is a shared commitment throughout the school. It appears to have brought an improvement in staff-student relations since its rules are clearly understood and consistently played out:

> Well I think the secret now is that we finally have an approach that we can use. We have a system whereas in the past there hasn't ... anything in black and white like we have now.

Interestingly, the AST attributes the longevity of discipline as an issue of concern in the school to inadequate policies rather than to essential characteristics of the students:

> I really don't think the kids have been any worse or the kids are any worse now. It's just that somebody's finally put a foundation in place that we've got something to work on (AST).

Regular observations reveal classrooms in which on-task behaviour is the norm rather than the exception. Rather than having their teaching interrupted, the teachers' lessons flow unproblematically. This is a considerable achievement which maximises the chances of students gaining access to academic knowledge. (For a contrasting situation, see Nicklin Dent & Hatton, 1994.) Rough behaviour, including physical violence, still occurs in the playground, however, staff claim this is less frequent than it used to be.

The material and symbolic awards attached to positive levels are obviously motivational. In 1993, 100 children had moved upward from Level A to Bronze, a further 50 moved on to Silver while another 10 moved on to Gold. Placement on negative levels did not seem excessive. In 1993, 36 boys and 7 girls were on a negative level. One child per term reached Level D and was suspended for three days, no children reached Level E.

Ethnicity did not seem to be significant. By the end of 1993, two thirds of the offenders were non Aboriginal and one third were Aboriginal; a figure consonant with enrolment percentages. There were, however, considerable male/female differences in infractions. Consider a breakdown of misdemeanours over one term. In Term 1, 23 of the 24 Level B offenders were male. Nine males and one female went from Level B to C. The one student who went to Level D was male.

It is fair to say that the only part of staff student relations which appears to be unchanged by the policy is disrespectful male/female interactions. The staff think that children learn from their community that men are authority figures and women are not. Hence males are respected, females are not. Female teachers therefore are given a much more difficult time than male teachers. Male infractions occurring at five times the rate of female infractions provide clear evidence of this trend.

Literacy Initiatives

While Basic Skills tests may be a problematic indicator of academic outcomes, they do provide a useful benchmark. Recent results indicate that academic performance in the school is improving. The 1993 Year 6 results are the best achieved to date with a result that is .2% below the state average in Mathematics and .7% below the state average in Language. Three years ago Year 6 results were 11% below the state average. It is the Year 3 students results which are particularly interesting since this class is the first to have benefited from the Reading Recovery, the AELDP and the concentration of resources strategy. The Year 3 results are also promising with a result which is 3% above the state average in Mathematics and .2% above in Language. The school has not previously achieved results above the state average. So despite the fact that Meiki's students are amongst those whose academic results are usually poor and those who are considered difficult to teach by conventional methods, these results provide some indication that the school is effectively working towards meeting the educational needs of its client group. Its effective use of social justice funding and state provided extra staff together with its capacity to plan in ways which both harnesses the support of teachers for policy and meets the educational needs of students, is central to its success.

Significant Omissions: Gender and Race Relations

While the school seems to be working effectively towards ensuring that students from Meiki are in the best position to take advantage of secondary schooling, and tertiary education, two significant areas of oversight are evident. It is possible that the failure to effectively implement a non-sexist policy or develop an anti-racist policy will later undermine their efforts.

The school has a non-sexist policy, however, little is done to activate it. It is in the area of gender relations that the school is most overtly socially reproductive. The sexist behaviour of the community is taken as a fact of life that cannot be altered. The principal says, 'The thing is, in working class communities such as this that the view towards women is not the best. I mean they don't see women in the best light'. One teacher explained the oft-expressed desire of the local community to have more male teachers as an unproblematic, and understandable desire to have more authority figures in the school. She said 'Oh yes, and you can understand why. We [i.e. the female teachers] all try our hardest (laughter) but [men are] looked upon as authority figures and I think we need a few more authority figures ... [women] don't have that authority'. Similarly, a community member claimed that since some male parents make violent approaches to the school, a male, preferably a large male, is the only appropriate choice for a principal. Such violence is taken for granted and viewed as unchangeable.

Certainly, the community seems to be structured in a way that makes it easier for male teachers to gain acceptance than for females. The current principal won community respect by playing football. There is, however, no sporting equivalent a female principal could join which would gain her access to most of the community. The town boasts a small nine hole golf course, however, the principal says,

> you don't get the general population involved in that ... I'd say forty or fifty people involved in it regularly. That'd be it. Whereas with the football, the people that aren't playing, everyone else is there watching them play. So you meet everyone that way.

Significantly, male/female differences in infractions under the discipline policy went unremarked while great relief was expressed when it appeared that Aboriginal students faired as well as non Aboriginal students. Concern about having a policy which might be racist is of far greater concern than the unequal state of male/female relations. Yet the gender issue is of sufficient force that it shapes daily pupil/teacher interactions and moreover, important decisions. For example, the female ET had been approached by the Regional Director to assess her interest in being the new principal before the current principal applied for the position and she said, 'Under normal circumstances I might have said yes, but I felt with - that we had all female staff - now I don't mean that because I'm female I couldn't be principal of the school. ... I don't mean that at all. But if I'd had some male teachers on the staff and I had a guarantee of a male executive teacher, I would have considered it'.

Even in daily encounters in the classroom, male students are demanding and receiving an undue proportion of teacher time. So, sexist gender relations are central in shaping daily life in Meiki. Moreover, by accepting sexist gender relations as immutable the staff is currently undermining its own policy which states that 'through education, the staff of the school will encourage the children to challenge the essentially sexist structure of our society in order to widen options for all people'.[8] It would therefore seem essential that teachers in Meiki consider this issue seriously. It is likely that stereotyped gender relations will later negatively affect Meiki's students educational and career choices.

There is no explicit anti-racist policy at Meiki. The school tends to adopt an ad hoc approach to teaching about racism rather than explicit anti-racist teaching despite the fact that the existence of an anti-racist state policy (NSW Department of School Education, 1992). Racism is only addressed when there is an obvious need. For example, Aboriginal students often give up participating in Saturday sport as a result of the racism they encounter on the playing fields in the neighbouring town. As incidents like this occur the principal addresses racism in class. Given the racial divisions between the adult Aboriginal and non Aboriginal communities, the relegation of racism to ad hoc treatment seems unfortunate. Ad hoc treatment is unlikely to undo the prejudices people have 'because they have been socialised into a culture which stereotypes and devalues others' (Pettman, 1986, p. 219). A more systematic attack on prejudice is needed, especially if Aboriginal students are to be equipped to deal with the racism they encounter within and beyond Meiki. Their ability to complete schooling, or to aspire to a future beyond unemployment, may be imperilled without active intervention by the school (McInerney, 1991).

CONCLUSION

At the levels of policy, practice and educational outcomes, Meiki school has much of which to be proud. It is obviously moving towards an education which is potentially socially transformative. However, it needs to ask itself what it needs to do, in addition to ensuring adequate levels of literacy and numeracy, before its students can be considered well educated and before they lose the descriptor 'disadvantaged'. Explicit anti-racist and anti-sexist teaching appear essential to enable students to make the most of the education with which they are being equipped.

ENDNOTES

1. The school has been visited once or twice a week. Parents, community members and teachers have been interviewed and regular classroom observations have been undertaken.
2. The usual convention of employing pseudonyms is observed.
3. There is no starker reminder of the change in the town's fortunes than that provided by the local cemetery. Recent graves, with very few exceptions, are simply mounds of dirt surrounded by a few stones to stake out the site. In the section where there are older graves, modest graves are frequently interspersed with expensive stone edifices.
4. Of course, it cannot be taken for granted that teachers in rural schools will know how best to act to further the interests of their clientele given the relatively inadequate preparation for rural teaching they receive in teacher education (see Meyenn et al., 1991; Turney and Wright, 1990; Watson et al., 1986).
5. Some programs, such as the Health and Nutrition days which are funded with DSP money, are unlikely to achieve much of significance in the short term beyond ensuring students have occasional days on which they are well fed and have some knowledge of what a healthy diet consists in.
6. Although the school does attempt to involve parents, many parents in Meiki have had unhappy experiences in schools and, despite the best efforts of the staff, find the school a threatening environment.
7. Inconsistency in the application of sanctions and rewards in disciplinary policies is recognised as one of the most common difficulties in NSW schools (NSW Department of School Education, 1993, p. 2 & 20).
8. This policy is not referenced to maintain anonymity.

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NATURE OF EDUCATIONAL DISADVANTAGE IN COUNTRY SCHOOLS: A SOUTH AUSTRALIAN PERSPECTIVE

David Craig — Australia

ABSTRACT

The paper raises questions for students in country areas in relation to participation, retention, achievement and post school options. The intention of the paper is to provide information and direction for further action and debate at a school and systems level. Some key questions that will be addressed are:

- What is the nature of the educational disadvantage confronting students in the country?
- What are the unacceptable differences in the educational outcomes of students in country schools?
- What social and economic issues are emerging which impact on student participation and achievement?
- What can be done to address the educational disadvantage experienced by country students?

The paper was developed as a basis for consultation with school based staff, educational support services and parents. Results of the consultation will inform priorities and strategies for an action plan for country students in South Australia. The consultation process was completed in April and the responses analysed in June.

This paper is intended to provide insights into the nature of the educational disadvantage experienced by country students. In doing so it highlights the difficulties many country students experience in accessing and participating in a broad balanced curriculum and the curriculum reform which is necessary to address this exclusion.

INTRODUCTION

In 1993 a task group was convened to develop an action plan as directed by objective 3 of the South Australian Education Department's Three Year Plan which is "To achieve equality of opportunity and social justice for students". The task group who contributed to the writing of this paper were:

Kate Bajzik	Aboriginal Education
Margaret Beagley	Open Access College
Barry Buderick	Eastern Area School
David Craig (executive officer)	Curriculum Division
Graham Davis	Western Area
Jennifer Emery	Curriculum Division
Mary Mansell	Country Areas Program State Advisory Committee
Peter Muller	Penola High School
Judi Quinn	Ceduna Area School
Susan Sweetman (convenor)	Curriculum Division

The task group agreed that the process for developing an action plan should comprise three elements:

- preparing and distributing information about the educational experience of students living in the country as well as information about system support directed to country schooling
- consulting with teachers, students, school councils, parent and community groups about priorities and strategies for an action plan for students living in the country
- developing an action plan for distribution to schools and divisions in 1995.

This paper represents achievement of the first step in the process of developing an action plan.

While this paper focuses on identifying the differences in educational outcomes for students in country schools compared with their metropolitan peers, it is important to keep in mind the considerable benefits of living in the country and attending the local school.

Perhaps the most problematic complication is that there is no shared understanding of precisely what the unacceptable differences in outcomes are for country students. Very little information is available from researchers or from educational monitoring which enable judgements to be made about if and how students in the country benefit less from schooling compared with their metropolitan peers.

This paper marks a starting point in understanding educational disadvantage as it relates to students in country schools. The task group is of the view that monitoring educational outcomes and research into related issues must be incorporated into an action plan so that future planning is based on a comprehensive information base.

EDUCATIONAL EXPERIENCE OF STUDENTS IN COUNTRY SCHOOLS

It appears from the information available that generally students in country schools do less well than their metropolitan peers or than the student population as a whole. Preliminary information suggests the differences in achievement and post school education are significant. South Australian participation data currently confined to subject enrolment in years 11 and 12 suggests substantial differences in some subjects and similarities in others.

The task group, in presenting information about educational outcomes of country students recognises the positive aspects of living in and attending schools in the country. When asked students, parents and teachers readily identify a number of factors which contribute to an enhanced quality of life characteristic of living in the country. An investigation (unpublished) of the barriers to and facilitators of student participation and retention to year 12 in Country Areas Program (remote and isolated) schools reports the benefits of country schools as perceived by parents, students and teachers.

- smaller schools and in many cases smaller classes contribute to supportive educational and social relationships between students and between teachers and students
- teachers are often part of the local community participating in the town's recreational and service groups
- parents have a strong commitment and sense of responsibility for the school which is often evidenced in fund raising activities and grounds development
- parents will often identify safety and lots of space as important for children growing up.

EDUCATIONAL DISADVANTAGE

In South Australia students identified as educationally disadvantaged are those whose educational outcomes compare unfavourably with the student population as a whole. The benefits of schooling are usually described in terms of students' achievement in the South Australian Certificate of Education (SACE) and their post school destinations particularly employment and/or tertiary study. Indicators of the benefits of schooling are generally accepted as attendance, participation and retention. That is, if students have very low absence rates, actively engage in the required areas of study and complete a full secondary education (usually equated with completing the SACE) they are more likely to be successful and have more options for further study, training or employment.

Equal opportunity legislation and Education Department policies identify the following groups as disadvantaged;

- girls
- students from non English speaking backgrounds
- Aboriginal students
- students with disabilities
- students living in poverty.

In recent years students living in geographically remote areas have also been identified. However, this has been done without any real examination of what disadvantage means for these students. There has also been confusion about the group to whom the disadvantage refers, ie is it all country students or only those in geographically isolated and remote areas?

Educational disadvantage for country students has traditionally been described in terms of provision or lack of it rather than outcomes. Teachers, parents and students cite restricted access to educational and other services as the major detriment experienced by students in country schools. The more remote and isolated schools and students are, the less opportunity they have to access social, cultural and educational activities available to students in the metropolitan area.

Some information about achievement and the indicators of educational success is available about country students as a group. However, until state wide information systems and plans for monitoring student achievement are implemented and data collected and analysed by group and gender, information about who benefits and does not benefit from schooling is unavailable at a system level.

The next section of this paper describes information available about students in country schools in relation to participation, retention and achievement compared with their metropolitan counter parts. Much of the information has been drawn from small scale investigations and local studies funded by the Country Areas Program.

PARTICIPATION

For the purposes of this paper participation refers to student enrolment in the required areas of learning. The sources of information at a state level are limited to an unpublished report from the Junior Secondary Review and Senior Secondary Assessment Board of South Australia (SSABSA) reports on SACE enrolments. Currently system wide data is not collected on participation in the primary years of schooling, however, the issues emerging from reports on participation in secondary schooling have implications for the early years of schooling.

As part of the Junior Secondary Review information was collected about curriculum offered and time allocated to subjects in schools with a secondary enrolment. Data for students attending Area schools was extracted in order to see whether any trends were apparent in relation to curriculum provision for students in country schools.

The significant differences between the subject emphases of Area schools compared to all schools are illustrated in the following table. Students in Area schools spend less time studying languages other than English (LOTE), music, drama, dance and more time studying agriculture, computing/keyboard, health and home economics compared with students in all schools.

Table 1: Average time spent on subjects in Area schools compared with all schools

Subject	Percentage of time
LOTE	40%
Music	33%
Drama/dance	32%
Agricultural studies	223%
Computing/keyboard	221%
Health	172%
Home economics	125%

Source: Junior Secondary Review, Interim Project Group 1991

Information from SSABSA about country students subject enrolment supports the findings of the Junior Secondary Review. At year 12 there are also marked differences between country and metropolitan students' enrolment in publicly assessed and school assessed subjects. The table below shows that in 1992 approximately one third of students in the country were enrolled in PES compared with just over half of the metropolitan students.

Table 2: Total number of subject enrolments in Year 12 PES and SAS courses

	PES*	%	SAS**	%
Country students	7 863	35.7%	14 141	64.3
Metropolitan students	25 603	55.6%	20 454	44.4

Source: Senior Secondary Assessment Board of South Australia, 1992

* PES refers to Publicly Examined Subjects

** SAS refers to School Assessed Subjects

It appears there are marked differences in curriculum provision between country and metropolitan secondary schools. However further investigation is required before judgements can be made. Reasons for differences in timetabling practices, curriculum offerings and subject enrolments need to be investigated.

The establishment of the Open Access College had as its central purpose the provision of R-12 courses through distance education which allows all students, particularly those in rural and remote areas, access to the full range of curriculum.

Students are able to enrol with the Open Access College to take subjects not offered by the school. In theory this means students are not restricted in subject choice by the size of the school they attend. In practice it appears that responses to distance education vary. Information from Education Review Unit reports and from an investigation into factors influencing participation and retention in Country Areas Program schools suggests that the extent to which the potential of distance education is maximised is directly related to staff support.

In some schools negative attitudes of staff corresponded with student and parent resistance to enrolling in courses delivered by distance education. In others where appropriate facilities and management structures have been established and support is provided, parents, students and staff identified significant benefits for students. In addition to successful participation and completion of courses, students and parents reported appreciation of the wider curriculum choice available and increased student confidence and independence as a result of acquiring a range of new skills and abilities. Students identified connections between these skills and their future education and employment opportunities.

While there is no doubt room for improvement in distance education delivery, particularly the technology used and the skills of delivery teachers, the information available indicates that action is required in some schools to ensure students benefit from this method of participating in the curriculum. Currently distance education is used predominantly by students in senior secondary. However increasing numbers of primary school students are enroling in LOTE through the Open Access College.

RETENTION

At a system level the apparent retention rates are calculated for the state by comparing the number of students at year 12 with the number of year 8 students five years previously. While schools have the capacity to track individual student's retention and are thereby able to calculate real retention rates, there is no mechanism at a system level to do this. This method produces retention data which is relatively accurate for the total student population. However it is considerably less useful for looking at retention rates for groups of schools or groups of students. The method takes no account of student transfers between schools nor of re-entry students.

Table 3: Apparent retention rates to year 12 in South Australian government schools in 1992

	Boys	Girls	Total
Metropolitan	97.7	103.2	100.4
Country	61.8	66.7	64.2
Total	84.8	90.1	87.3

Source: Information Management Unit, Education Department.

The retention to year 12 of students living in the country appears significantly lower than for students in the metropolitan area. However it must be kept in mind that a number of students living in the country leave the local school to complete their education in a metropolitan school or a school in a regional centre. If there was the capacity to collect information using home location rather than school location the differences may not be as great. What these figures do show is that significant numbers of students in the country leave their local schools before completing Year 12. Presumably a reasonable proportion complete their schooling elsewhere.

When comparing figures for metropolitan and country school leavers provided by the Australian Bureau of Statistics (1991) census, it appears the school leaving rate is higher for metropolitan students; 11% of metropolitan students left school at age 15 years compared with 9.7% of country students.

Clearly further work is required before we have an accurate picture of retention in country schools and the reasons for students leaving their local schools.

A small scale investigation funded by the Country Areas Program (CAP) which targets remote and isolated schools looked at retention of students in a group of schools on the west coast of Eyre Peninsula. (Girls in Rural Schooling, Education Department 1993). The report claims that students from small primary schools who attend Area schools to complete their secondary education have lower retention rates than students who complete their primary schooling at an Area school.

For these students the retention rates in the period 1980 to 1990 were consistently less than 50%. It appears that retention to year 12 for students from small, remote schools is a significant issue. The report suggests that matters relating to transition, induction, travel and living away from home require further investigation.

Another study (unpublished) undertaken in six schools in the Murray Mallee region of the state asked students who had recently left school, their perceptions of what schooling in the country needs to offer students in order to prepare them for further study and/or work. This group of school leavers identified a number of areas for action including:

- improve access to information and resources, and the opportunity to work independently with support when needed
- provide better environments for academic excellence
- improve information about up to date career options and guidance in choice of subjects to fulfil these career options
- improve access to a wide range of subjects, whether it be through distance education or face to face teaching
- appoint good teachers, teachers are an important part of a student's life
- encourage and expect students to continue their education after leaving school.

The task group considers some of the areas for action identified above are worth further investigation. In particular the provision of better environments for academic excellence. Anecdotal evidence suggests that in some schools, both metropolitan and country it is accepted that students do not strive to be successful and that the peer group actively works against student retention to year 12 and successful completion of SACE.

The Country Areas Program investigation into factors assisting and inhibiting student participation and retention in country schools reports that some teachers and parents described their school as having a culture of mediocrity.

Further investigation is required particularly into the roles that school staffs, parents and students have in maintaining or changing such a culture.

Questions that arise from this information are:

What factors contribute to students moving from country schools to complete their secondary education?

What impact does the exodus at years 8, 10, and 11 have on the students remaining in the local school?

How wide spread is the culture of mediocrity and what action can be taken by school communities to address it?

ACHIEVEMENT

Until the plan for monitoring student achievement is implemented data available at a system level on student achievement is restricted to reports from SSABSA on students' achievement in stage 1 and 2 of the SACE.

For most subjects in SACE stage 2 there is little difference in achievement between country and metropolitan students. However there are some differences which the following tables demonstrate.

In maths and science subjects enrolment and attainment are generally lower for students in country schools. The following table shows mean scores in SACE stage 2 subjects in 1992.

Table 4: SACE Stage 2 Maths I, Maths II, Physics and Chemistry

Subject	Metropolitan				Country			
	Male		Female		Male		Female	
	Mean Score	Enrolment	Mean Score	Enrolment	Mean Score	Enrolment	Mean Score	Enrolment
Maths I	13.4	1375	13.9	647	11.8	305	12.6	144
Maths II	13.3	1359	14.1	641	11.6	304	12.5	143
Physics	12.8	2301	13.3	1075	11.0	529	12.0	246
Chemistry	13.0	1718	13.1	1113	11.3	416	11.7	289

Source: Senior Secondary Assessment Board of South Australia, 1992

Mean Score refers to the average subject achievement score.

Girls achievement in each of the maths and science subjects is higher than that of boys, however the enrolments of girls in those subjects is about half that of boys. Boys in country schools do less well than boys and girls in metropolitan schools. The difference in achievement between girls and boys in country schools is less marked.

Further information is required to provide a comprehensive picture of students aspirations and post school destinations. It can probably be assumed that fewer girls choose maths and science subjects for reasons based on stereotypes of girls capabilities and aspirations. This information has implications for subject counsellors in senior secondary, maths and science teaching and career education courses across the R-12 range.

Other information obtained from the Senior Secondary Assessment Board of South Australia, 1992 indicated a higher participation and achievement rates in gender stereotyped course options. This was particularly noticeable for boys in automotive maintenance and furniture construction.

To what extent do students' subject choices reflect their post school aspirations?

What strategies can be implemented to broaden girls and boys subject choices?

POST SCHOOL DESTINATIONS

The decline in the rural economy has had a significant impact on country students post school options. Opportunities for employment for both girls and boys on farms and local businesses and service industries are no longer guaranteed.

The National Board of Employment Education and Training (1991) reported low participation rates of country students in further education and training and identified it as a major concern.

Table 5: Participation in TAFE and Higher Education by age group for South Australia (% of relevant age cohort)

	TAFE		Higher education	
Age	Metropolitan	Non metropolitan	Metropolitan	Non metropolitan
15 to 19	12.1	10.7	10.5	0.8
20 to 24	10.7	2.9	13.7	0.9

Source: Australian Bureau of Statistics 1989

• This table does not necessarily represent the origins of the students (metropolitan/non-metropolitan) it might only represent their current location while studying.

Further information is required from young people in the country about what assists and inhibits their participation in further education and training. The study, Girls in Rural Schooling found that the percentage of girls taking up further education or training as a post school option after completing year 12 is the same whether schooling was completed at the local Area school or at a school in a regional centre. However, girls who completed their education locally tended to select a narrower choice of post school options. This study also revealed that out of a cohort of 44 Aboriginal girls, in the year after leaving school only 14 (34%) were employed or participating in some form of further education and training.

The following table provides information on 1992 Year 12 students in government schools who applied, were given an offer, enrolled or deferred in 1993 courses at a higher educational institution. As a guide to interpreting this data, in 1992 28.8% of year 12 students were enrolled in country government schools and 71.2% in metropolitan government schools.

Table 6: SATAC applications, offers, enrolments and deferments 1992 for 1993

	Applications		Offers		Enrolments		Deferments	
Country	1937	24%	1009	24.3%	682	21.0%	212	39.7%
Metropolitan	6147	76%	3139	75.7%	2571	79.0%	322	60.3%

Source: South Australian Tertiary Admission Centre Sixteenth Annual Report to30 June, 1993

In 1993, 16.7% of students in country government schools enrolled in a higher education institution compared with 23.5% in metropolitan government schools.

Information from the ABS (1991) indicates that in South Australia 13% of metropolitan 15 to 25 year olds who are not in the workforce are unemployed compared with 20% in the country. It appears that employment opportunities for young people living in country areas are more restricted.

Clearly more information is needed about country girls and boys post school destinations.

To what extent are schools monitoring students participation in further education, training and employment?

What can be done at a school and system level to improve students opportunities for participating in higher education and training programs in country areas?

This brief overview of educational outcomes for country students raises more questions than it answers. Current initiatives for monitoring participation, achievement and retention will in future years provide the basis for more informed decision making. For the time being however, we must carefully consider the data available along with information about the experience of teachers, parents and students and make our best judgements about action to be taken to improve schooling for all students in country schools.

EMERGING ISSUES

During the preparation of this information paper a number of issues were raised in conversations with principals, teachers and school support staff in Western and Eastern Areas. The task group invites response to the following issues, identification of additional issues and comment on their impact on teaching and learning in country schools.

Staffing

As mentioned in the introduction country South Australia is diverse making generalisations about characteristics of schools and schooling in the country almost impossible. The staffing profile of country schools is often raised by teachers, principals and parents as an issue related to disadvantage.

Some schools in the country have relatively high staff turn over rates, a high proportion of teachers recently completing their training, a high proportion of contact teachers and difficulties employing temporary relieving teachers (TRT's). Management issues associated with these characteristics include induction programs, continuity of program development, school development planning and training and development.

However, there are country schools with very low staff turn over rates and training and development for teacher renewal is identified as a priority given the expectations of schools in relation to initiatives such as national statements and profiles, social justice and performance management. Teachers and principals and support staff also identify training and development as a priority for principals taking up their first appointment, teachers returning to work after relatively long periods of leave and teachers who have worked in small country schools for all or most of their careers.

While the above issues are not confined to country schools, the provision of training and development is complicated by costs and time required to travel to district based or centrally provided programs. Distance education technology has the potential to overcome the constraints of distance and requires further investigation and development.

Changing Demography Of Country Towns

The task group has been unable to gather data about social stratification in country towns. However principals and school support personnel report that particular towns appear to be attracting increasing numbers of families and students who qualify for school card.

Over recent years relatively low cost housing has become available in these towns or on nearby farms and families are moving from the metropolitan or greater metropolitan area to take advantage of low rent, and an improved quality of life. In some towns new housing developments are being occupied by low income families. These changes impact on schools as the student population becomes more diverse. There are consequent issues for school staffs and school councils to address to ensure a cohesive school community and quality schooling for all students.

Over the last two or three years student transience has also been recognised as a significant issue. Anecdotal evidence suggests that moving school more than once during a year has a significant impact on the educational outcomes of students. There are undoubtedly issues here for school management and organisation and for teachers' programming and planning to minimise the negative impact of transience on student participation and achievement.

Interagency Support

Increasingly, schools in regional centres and larger country towns are finding they require departmental student services and the services of other agencies in their efforts to support students and their families. There are a number of difficulties associated with accessing support services. Most services are located in regional centres which in some cases are understaffed because positions can not be filled. Schools at some distance from regional centres often have to wait for scheduled visits from support personnel.

Changing Employment Opportunities

The reduction of employment options in country towns and on farms has been occurring steadily over the past few years. The impact of these changes are reported in terms of students' and families feelings of anger, frustration and hopelessness as the traditional employment opportunities which for some students were guaranteed, no longer exist. Farms are sold, share farming is no longer viable, local businesses lay off staff or close altogether. There are implications for schools in relation to both supporting students as they come to grips with these changes and in the development of useful career counselling and work education programs.

To what extent are the social and economic issues identified above experienced across country areas and how are school communities responding?

What further issues are emerging which impact on country schools and how are schools responding?

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THE STUDENTS AT RISK PROGRAM (STAR) AND QUEENSLAND SECONDARY SCHOOLS WITHIN THE PRIORITY COUNTRY AREAS PROGRAM (PCAP)

Paul Loney — Australia

Recent attention in social justice circles has centred on the educational issues associated with students subject to intersecting forms of disadvantage. The recent Ashenden and Milligan 'Review of Allocative Mechanisms for Commonwealth Equity funds for Schools', highlights this in recommending that,

> Ways be found to target more accurately multiple or intersecting forms of disadvantage including:
>
> - the intersection of poverty and NESB, and poverty and isolation;
> - increasing allocations to STAR;
> - reviewing other ways of targeting students who suffer multiple disadvantage - (p. xii)

This paper will briefly examine the coincidence of at-risk secondary students in two geographically isolated locations.

The Students at Risk and the Country Areas, General are both components of the National Equity Program for Schools (NEPS). They provide for Queensland government schools in 1994 for STAR, $817000 and for Country Areas (PCAP in Queensland) $3099000. — See Table 1.

TABLE 1

PCAP SCHOOLS DESIGNATED AS STAR SCHOOLS 1994 FUNDS ALLOCATED 1994

SCHOOL	EDUCATION REGION	PCAP AREA	FUNDS ALLOCATED 1994
Collinsville	Northern	Northern	2625
Ravenshoe	Peninsula	Northern	2024
Cooktown	Peninsula	Northern	1 646

Moranbah	Capricornia	Central	6717
Cunnamulla	South Western	South West	2700
St George	South Western	South West	2700
Tara	South Western	South West	2700
Charleville SSC	South Western	South West	1 073
Hughenden	North Western	North West	2400
Longreach	North Western	North West	1 600
Winton	North Western	North West	1 600
TOTAL			27785

STAR has the objective of identifying those students most at risk of not completing secondary school and encouraging their continued participation — to complete secondary schooling with sound educational attainment. PCAP's objective is to assist schools and community groups to improve educational participation, learning outcomes and the personal development of students disadvantaged by restricted access to social, cultural and educational activities and services because of their geographic isolation. (Administrative Guidelines pp. 71,77).

Program Administration in Queensland

STAR

Funds are allocated to the eleven education regions on the basis of their Year 10 populations and specific populations in schools with retention to Year 12 below the state average. See Map 1. Map 1 is Queensland Education Regions. Regions then decide which schools will be invited to make submissions for consideration by a regional STAR committee. There are 76 government STAR schools. Proformas for submissions and educational and financial accountability are provided to schools. Regionally approved STAR programs are then collated centrally to ensure they meet STAR objectives and tally financially.

Accountability documents are held regionally. Copies are forwarded to DEET in Canberra. In summary, the regional role is critical to the process.

PCAP

PCAP is managed intersystemically in Queensland. Approximately 91% of the state's area is PCAP designated. School community proposals are considered within the four PCAP Areas; Northern, South West, North West and Central. See Map 2, Queensland PCAP Areas.

So the challenge within STAR is for schools to decide on the criteria for targeting the students perceived to be at risk and then to make appropriate interventions to enable their successful completion of secondary schooling.

In PCAP schools apparent retention to Year 12 in 1993 was 56% compared with nonPCAP schools at 78% and schools Statewide at 76%. These figures are of course affected by factors including migration, inter-sector and inter-school transfers. Certain PCAP schools do not offer post-compulsory years and students may complete their schooling at non-PCAP schools thus boosting those schools' apparent retention rates (Taylor, 1993, 7, 8). In the case of PCAP schools then, retention is an important educational issue. It is interesting to note that though PCAP schools are generally smaller than other schools - 163 students on average for PCAP schools with secondary offerings compared with 696 for non PCAP secondary schools - their comparative subject offerings are not so startlingly contrasted at 36.9 and 46.5 subjects respectively, (Taylor, 1993, 7). One might surmise that most students could select an interesting combination of six subjects from 37 on offer at an 'average' PCAP school.

Regions usually decide that a certain school will be STAR - designated on the basis of local knowledge and specific information about schools' retention levels. Guidelines for proposals are provided and financial and educational accountability requirements outlined. Schools must then consider how to identify their at-risk students and decide if interventions should be specifically for those students at risk or involve some degree of whole school change. Specific responses to these questions are examined in the school studies below.

Two STAR/PCAP Schools

St George has a population of about 2200 and is in a cotton growing area 524 kilometres south west of Brisbane, 195 kilometres South of Roma. Its high school enrolment is approximately 240.

Hughenden State School provides schooling to Year 12. The town's population is similar to St George's with about 1900 and is located 1744 kilometres north west of Brisbane and 373km south west of Townsville in a wool, cattle and grain area.

Table 2 outlines the schools' levels of STAR funding in the last three years. Both centres are shown on maps 1 and 2.

TABLE 2

STAR FUNDING 1992-1994

SCHOOL	1992	1993	1994
Hughenden	2799	4700	2400
St George	21604	13000	2700

Teachers of St George High School outlined in their STAR proposal for 1993 '...low retention rates, very few female Aboriginal students are found in the senior school,the lack of valuing of education by many of the parents and problems of economic hardships'. A home-school liaison officer could contact families and encourage parental involvement, liaise concerning student problems and provide in class support for students at risk. The school felt an Aboriginal liaison officer could undertake home visits to Aboriginal families with a reasonable prospect of acceptance and trust.

At St George reduced funding has meant that the home-school liaison officer (HSLO) is now employed for ten hours weekly. Attendance rates have improved through all absences being followed up with parents; absences have fallen from 15% to 10%. One of the factors in education not being highly valued is the local availability of quite good unskilled work opportunities. The school reports, 'The most exciting part is getting the officer to work with at-risk students in class as a tutor across all year levels. This particularly relates to the school's vertical timetable which meets students' differing styles and rates of learning.

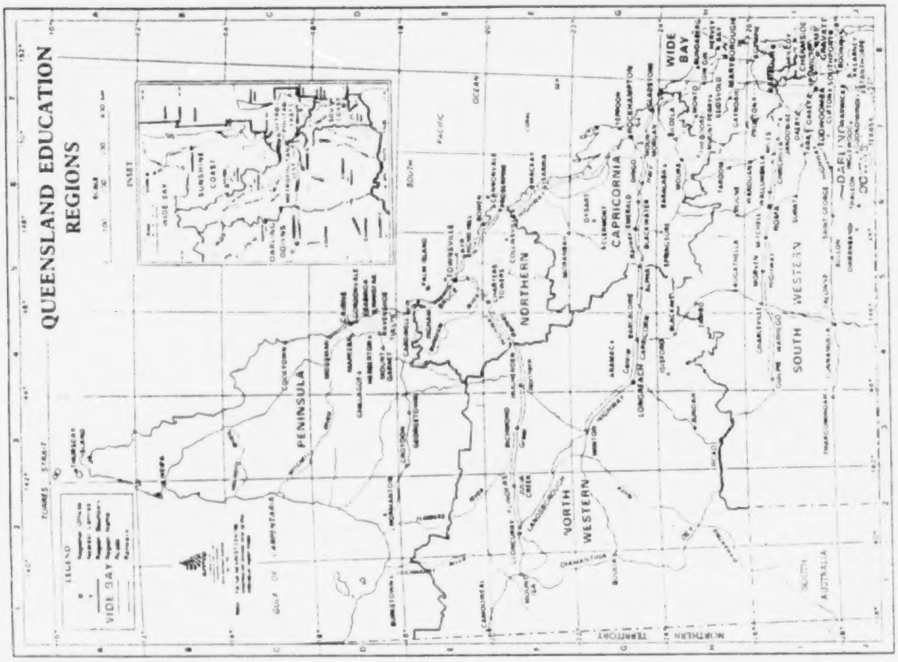
Students who would have left are staying on - the introduction in Years 11 and 12 of one day per week work experience has assisted here. Aboriginal girls are now completing their schooling. Aboriginal families who may have felt uncomfortable with teachers and administrators feel the HSLO is closer to them - an essential link between home and school. St George's Aboriginal population ranges between 16% and 20% so building these partnership is critical to students' success.

What is it that makes these students 'at risk'?

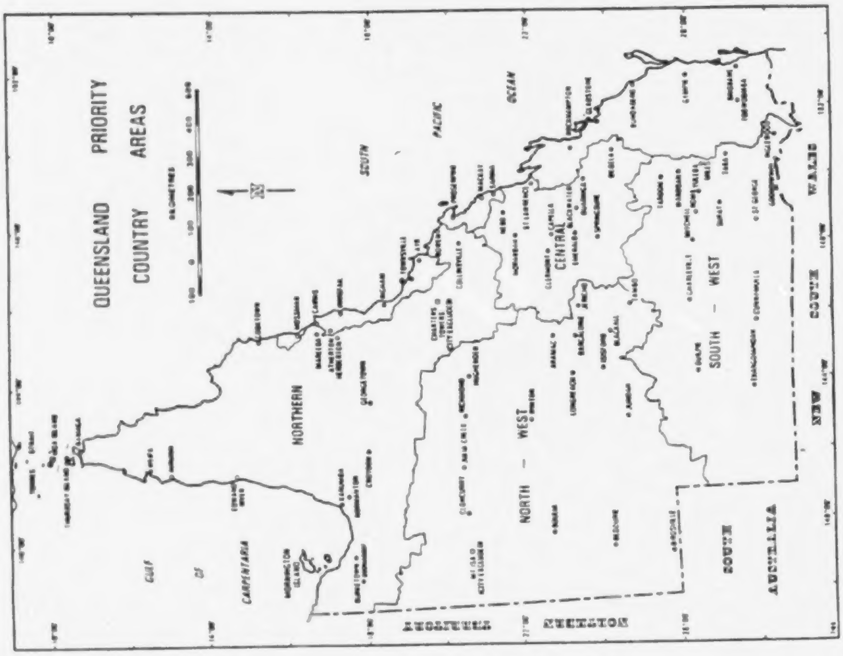
A sense of isolation and a perception that St George is the 'whole world' tend to make the challenge of striving to go on to further study, away from home, seem just too difficult. The immensity of a university in Brisbane, the complexity of urban transport systems can make it, 'very scary leaving'. It is here that PCAP is able to complement the work of STAR for these students. It helps, for example through the use of the PCAP bus, to introduce students to a wider world enhancing their valuing of education and the possibilities it can unfold. About the nineteen seat PCAP bus the school says, 'We use it to see the world.' It is shared on a half year each basis with Cunnamulla and certainly meets the need to broaden educational outcomes for students with limited resources. The school notes that, 'Students come to realise that if they have insufficient skills they run the risk of having little or no employment.'

What are the trends for senior students here? Retention is rising. At least 38 of the present 45 students in Year 10 are expected to proceed to Year 11. The HSLO has clearly proved to be invaluable — 'She has access to information and is seen to be a true member of the community'. Because of this she provides a continuity of support for the community's at risk students. In St George which has a very strong sense of community identity, this is particularly

MAP 1


QUEENSLAND EDUCATION REGIONS
INSET
LEGEND
PENINSULA
NORTHERN
NORTH WESTERN
CAPRICORNIA
WIDE BAY
SOUTH WESTERN
DARLING DOWNS
GULF OF CARPENTARIA
TORRES STRAIT
SOUTH PACIFIC OCEAN
CORAL SEA
NORTHERN TERRITORY
SOUTH AUSTRALIA

MAP 2


QUEENSLAND COUNTRY PRIORITY AREAS
KILOMETRES
N
NORTHERN
CENTRAL
NORTH - WEST
SOUTH - WEST
GULF OF CARPENTARIA
SOUTH PACIFIC OCEAN
NORTHERN TERRITORY
SOUTH AUSTRALIA
NEW SOUTH WALES

important. Teachers are valued but as members of a statewide organisation, 'Teachers will never be locals'. Clearly the HSLO is a critical agent in developing genuine partnerships within the school community and enhancing outcomes for at risk students.

In 1992 Hughenden State School used STAR funds with the aims of:

- better informing students of their post-school options, particularly tertiary study;
- enhancing year 10 student's skills to encourage their continuation to Year 12;
- enhanced workplace standard computer skills for all senior students.

Again the school's recognition of the need to broaden student's post-school horizons is seen in the use of funds for educational experiences beyond Hughenden - in 1992 to several tertiary institutions and employers in Townsville (Year 12) and a careers market in Charters Towers (Year 10).

BEST COPY AVAILABLE

At Hughenden the students are recognised as having high post-school risk potential. There is a high level of years 10 to 11 retention yet the school sees the students having risks related to their geographic isolation; the students are less familiar with the range of post-school employment and training possibilities. They may see less relevance in their schooling and be motivationally at risk as they note people succeeding in local employment with limited schooling backgrounds.

Hughenden offers 'a good range of subjects' and has tracked the 18 Year 12 leavers of 1992. Nine had stayed in Hughenden, two-three had gone to tertiary education. None was unemployed.

For the future Hughenden intends to continue with its vocational excursions to Townsville with links to James Cook University, TAFE, the CES, Pimlico State High School, major employers such as K-Mart and the copper refinery. They intend to expand Years 11 and 12 options with vocational modules and a curriculum which is very practical and oriented towards students' futures'. STAR funds can assist here in making the senior years attractive and appropriate to ability levels.

Interestingly the view of 'escape' being necessary for success is being questioned in Hughenden. While there is value in study or employment away for a period, the community needs the enrichment of its educated youth and the school is aware that there may be less local competition for employment. In the rural community there may be greater emphasis placed on one's personal background. Hughenden has 270 students. Their circumstances are known and understood by the school. Again the PCAP bus is seen to be of great importance, in providing bus transport 'we live and die with it.' Its role is strategic in achieving the school's aim of '... getting kids successful results at the end of their schooling'.

Before leaving these two case studies of schools hundreds of kilometres apart it is their similarities of concern for the best attainment and set of options for their students which stand out. Their approaches differ, while both seek to strengthen student's understanding of the larger world beyond, they also respect and seek partnership with the local community. In both, a positive conjunction of PCAP and STAR aims and resources occurs to meet the uniquely rural educational needs of students.

A STAR seminar (Townsville, 1993) identified issues which relate directly to these two case studies. Participants noted that:

- schools needed more than a one year period STAR-funded to allow them to achieve more;
- that program overlap e.g. PCAP, STAR, occurs because students may experience multiple, intersecting disadvantage.

Important STAR criteria included students' home socio-economic status, schools' retention rates and juvenile offending. What contributes to our students being at-risk? Important factors include economic, motivation (appropriateness of the curriculum) early pregnancy, itinerancy, peer influences and family crisis.

Teachers are highly skilled in identifying at-risk students and equally concerned about enabling students to complete their schooling with optimal outcomes. Nationally, Country Areas Program (NATCAP) projects are being undertaken to enhance secondary schooling in geographically isolated areas. Approximately $9 million in the 1993-95 period has supported an array of initiatives many of which are already proving highly successful in fields including curriculum development, distance careers and vocational education. In geographically isolated schools linkages between STAR and PCAP are already assisting in bringing about measurable improvements in students' completion of secondary schooling - with enlarged post-school options and improved life chances.

Hughenden and St George schools show the links across PCAP and STAR and are overlapping of support for at-risk and geographically isolated students. There is an exciting challenge here to seek the synergies which come from sharing expertise to meet the needs of all students. The Commonwealth encourages this more accurate targeting of students with intersecting disadvantage and these two brief studies signal important future directions.

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CHARACTERISTICS ASSOCIATED WITH SUCCESSFUL COMPLETION OF POST-COMPULSORY SCHOOLING AND HIGHER EDUCATION IN RURAL VICTORIA

D J Lloyd, J C Lloyd, V R Prain and K J Smith — Australia

ABSTRACT

This project has involved correlating the academic records of La Trobe University, Bendigo students who have graduated in minimum time with their regional secondary colleges and studying those Colleges' practices. A series of interviews and analyses was used to identified a range of practices that respondents believe to be associated with successful completion of year twelve studies.

The eight regional secondary colleges included in the study represent: successful institutions, a balanced mix of small, medium and large Colleges, a geographic spread through central and northern Victoria, and State and private colleges.

The study identifies that the successful Colleges have dedicated staff, including key people in leadership positions, who focus in a unified way on effective counselling about a realistic range of subject choices and career options for students. The colleges have structured career education courses commencing in or before years 9 and 10 which assist the integration of work and career issues into all curriculum areas, and strong community support for school programs.

The findings are considered in detail and are the subject of a series of recommendations for those involved with the provision of rural secondary education.

AIMS OF THE STUDY

The objective of the Country Areas National Component, to which this study is a contribution, is to assist secondary schools and community groups to improve the educational participation, learning outcomes and personal development of students disadvantaged by restricted access to social, cultural and educational activities as a result of geographic isolation.

The aim of this Component is to increase the number of students in prescribed country areas completing Year 12 and to expand the educational opportunities available to them. This component also aims to improve levels of student achievement and to reduce the incidence of gender bias in student choice, particularly among students from low socio-economic backgrounds.

This study aimed to identify the major factors affecting

1. Retention rates and achievement levels of rural student proceeding from Year 10 through to year 12.
2. Student subject choices and the impact of these choices on retention to year 12.
3. The influence of school-based career education at Years 10 and 11 on the career path aspirations of students.
4. Girls' participation rates to Year 12.

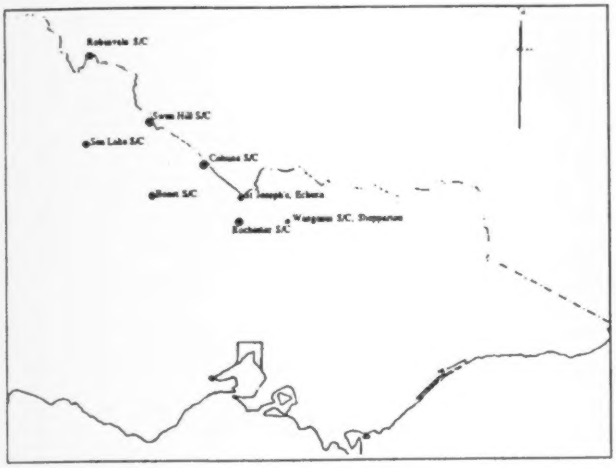
As the data collection phase proceeded other factors emerged and these will be dealt with in the body of the report and in the recommendations.

RESEARCH METHODOLOGY

The study involved selection of a range of regional secondary colleges from which students had progressed to university study and had, in high proportions, graduated in minimum time. This phase of the study required analysis of the La Trobe University, Bendigo's student record system and identification of groups of students from secondary colleges with higher than average progression rates since 1989, using programs developed for the purpose.

Participating Schools

Secondary College, location	Enrolment	Yr 12 enrolment	Catchment radius, km
Boort	185	40	40
Cohuna	365	40	60
Robinvale	455	48	60
Rochester	540	60	40
Sea Lake	170	19	40
St. Joseph's, Echuca	500	85	70
Swan Hill	1175	134	60
Wanganui Park, Shepparton	850	118	20



Students attending the Colleges are drawn from a range of rural communities including those that are predominantly farming (cropping, dairy or horticulture,) rural service centres or a regional centre. Two centres are developing a tourism industry in conjunction with more traditional rural activities.

The Project used a qualitative method of analysis of transcribed interviews with staff, students and parents of the eight schools identified. The design team chose to focus on a sample of schools of varying sizes to establish a broader picture of relevant factors in the study. School enrolments varied in the sample schools from 170 students to over 1,100.

The project had a Design Team which was based at La Trobe University, Bendigo and met on a regular basis from late 1992 through most of 1993.

The research design consists of the following phases: a pilot study to refine the research methodology; and data collection from the other participant schools.

Data were collected through interviews of administration staff, teachers, community personnel and students in eight Secondary Colleges in Northern Victoria from August to October, 1993.

The Pilot Study

One Secondary College was chosen for the pilot phase of the research program. The planning aspect of the project then proceeded as follows:

a) Preparation and refinement of 'screening' questionnaires to be administered to all students at Years 9 and 11.

b) Preparation of a semi-structured interview format to be carried out with a representative selection of students selected from the screening questionnaire (available on request).

Data Collection was carried out as follows:

a) Initial screening of students. The questionnaire was administered by the Principal of the school during the week prior to the interview phase. The questionnaire was designed to sort students initially according to the following categories.

Intend to:	leave	not leave
A supportive learning environment	3	3
Non-supportive learning environment	3	3

An attempt was made to select the 12 students on the basis of the above grid. In addition 'intuitive' insights from teachers influenced the selection process.

b) Students were interviewed using a semi-structured format. Interviews were tape-recorded. This process occupied 10-15 minutes of each student's time.

c) Administrative staff, teachers and community personnel were also interviewed through a semi-structured procedure.

d) All interviews were transcribed for analyses.

Following the pilot phase of the research a teleconference was held with participants to that stage to evaluate the pilot study procedure. This involved the key members of the project team and the Principal and Deputy Principal of the pilot Secondary College.

As a result of the evaluation it was decided to eliminate the initial screening phase for the main section of the project. This was seen to be too cumbersome to administer to all students in Years 9, 11 and 12 and generally teachers could be relied on to select a balanced range of students for the interview phase. Also a slightly revised interview schedule was drawn up.

The Study

The main section of the research project involved the following steps:

- Administration of semi-structured interviews to 12 students (randomly selected but with gender balance) from each of the Years 9, 11 and 12.
- Interviews with the Principal, Deputy Principal, Careers teacher and two other teachers.
- Interviews with two and sometimes three community members. These were usually people with a long-standing association with the school concerned (e.g. School Council member).
- All interviews were tape-recorded and transcribed.
- Transcribed material was analysed according to the broad research questions identified as relevant in the Victorian rural context.

FINDINGS

This study has identified the following as important factors in students' retention to Year 12:

- Parental and community support and extensive community participation in school activities
- Effective school programs and structure in relation to career education, subject choices and subject delivery including distance education
- Career education programs that were integrated into the curriculum from junior secondary level
- Individualised expert career and subject counselling for students in terms of VCE course and subject selection and post-school goals
- Effective pastoral and study skills support for students
- Specific programs to address gender-stereotypical attitudes and post-school goals of students
- Generally smaller class sizes and intensive individualised support by teachers
- Effective work experience programs where students had placements beyond the immediate environment

The following barriers to participation and student retention to Year 12 were identified:

- Economic hardship for rural communities
- Restrictions on resources and subject provision in some schools
- Community attitudes towards, and knowledge of, post-school options for students
- Lack of positive role models for girls and Koori students within a local community

The findings in both caregories are considered in more detail in the sections below.

Facilitating Retention and Participation in Year 12

This study has identified the following factors as important in rural students' retention to year 12 :

Parental and Community Support
School Programs and Structure in Relation to Career Education
Student Work Experience

Parental and Community Support

All students in the study acknowledged the crucial role of parental encouragement in the decision to complete year 12. As indicated elsewhere in this study, most parents perceived the necessity of their children completing year 12 as an essential preparation for work and further study. The majority of parents believed that there were minimal future work prospects for their children in the local region. All schools in the study had very strong community support for VCE programs, evidenced by the work of service clubs in career education, the strong support of local industries in work experience placements, and the support for curriculum innovation at the senior level of the school.

A strong positive community perception of the school linked with extensive community participation in all aspects of the schools' operation were clearly of fundamental importance to effective student retention to Year 12.

School Programs and Structure in Relation to Career Education

- Staffing Allocation for Career Education

Schools varied in their allocation of staff and professional development support for career education from a full-time Career Education Teacher in two schools to a school where a teacher conducted Career Education as an addition to a full teaching load. Some schools had more than one staff member teaching career education courses. In more than one school there was an informal recognition that all staff teaching at senior level in the school had a major role to play in advising and monitoring students in terms of course progress and career advice. In schools where there was a substantial staff time allocation to career education an intensive, individualised career advice process for students was possible. This was achieved by all schools in the study.

- Role of Career Education Teacher

Effective strategies to advise and support students in career and subject choices include the following:

(1) Career teachers at some schools give all year 10 individual counselling in year 10, and two interviews with each student in VCE in both year 11 and 12. One career teacher asked each student in Year 11 to formulate at the start of the year a career plan and the steps to achieve it. This plan was later reviewed by the career teacher and each student.

(2) Some schools run very intensive career programs in year 10 with students expected to research possible career options and career pathways using the Job And Course Explorer program (JAC) and then organise mock planners for VCE in terms of appropriate subject choice, with follow up mock interviews with potential employers in the chosen career field.

(3) Career teachers run evening career expos, career week programs, and organise for ex-students to talk to current students about their studies and the issues of living-away-from-home.

(4) Special guest programs and speakers have been organised at several schools including Women Talk Work, and drama and musical programs oriented to work issues.

(5) All career teachers in the study had developed dedicated areas for the display of, and counselling on, career matters. These included career reference centres in the library, and classrooms permanently established with computer and other facilities for students.

(6) All career teachers coordinate work experience although students are expected to initiate contact for placement themselves. Some career teachers are extremely enterprising in making sure that students are supported in matching their work experience interests to an appropriate context. Students in the participant schools have had work experience in the last five years in Darwin, Canberra, Sydney, and Melbourne, as well as the major cities and town within the immediate region.

(7) All career teachers in the study coordinate a career and work education program in Melbourne for year 11 or 12 students. This program varies in length across schools from three days to two weeks. The program includes visits to the Career Reference Centre, tertiary institutions, and various orientation activities. One career teacher organises for groups of two or three current students to have a meal and sometimes attend classes with an ex-student who is studying in Melbourne.

(8) Some career teachers liaised extensively with subject teachers in years 7-10 to ensure that the content in these subjects focused on possible career options related to this content.

In summary there are a wide variety of activities involved in the organisation and delivery of effective work and career education. As one career teacher commented:

> Unfortunately the role of the careers teacher in most schools is very much misunderstood. A lot of my peers, and a lot of peers of other career teachers think that because you don't teach much, you are not doing anything. They really have no idea of what you are doing. The position does not get the recognition it ought , or the time it ought.

School Programs in Relation to Career Education

- School Programs Years 7-10

To facilitate effective student retention at school including effective subject and career choices for VCE all participant schools run a range of programs in these year levels. Effective Strategies include the following:

(1) Vertical Modular grouping of subjects in Years 7-10. This gives students practice in choosing from a wider range of subject choices and also first-hand experience of these subjects.

(2) One school allocates a teacher as a personal tutor to groups of six students. This teacher is a key contact person

throughout the students' secondary schooling (years 7-12). This tutor offers advice and support in pastoral, welfare, and subject matters, study skills, and career choice. As a result of this personalised program there is effective monitoring and support of students throughout their years in the school. Other schools run variations on this program with peer groups, home groups and welfare groups coordinated at different year levels. Clearly individual and subject teachers often play a crucial role in the formulation of students' career aspirations.

(3) Several schools had structured their year 9 -10 subject offerings in half-year modules to give students a broad experience of subjects on which to base VCE subject choices. Some schools have focused specifically on technology subjects in years 9-10 to encourage so-called "non-academic" students to pursue VCE study in this field. One school was offering Units 1 and 2 of VCE subjects to year 10 students to give these students a VCE sixth subject to strengthen their chances of tertiary entrance.

(4) All schools ran intensive VCE subject-selection evenings, lunchtime discussions, and counselling sessions with parents and students to familiarise them with tertiary course prerequisites, and effective groupings of subject choices for VCE. In some schools all year 10 students are counselled individually about their subject and career choices.

(5) To support Koori students in developing and practising study skills one school developed a Koori Homework Centre which was run after school and staffed by teachers and the Koori educator. This was run in a hall for an hour after school with students bussed home afterwards.

(6) One school had a formal policy of encouraging teachers in the presentation of their curriculum areas in years 9-10 to focus on the possible careers arising from expert knowledge in those curriculum areas. In year 10 at one school, for instance, all students in Science research a science career.

(7) All schools ran a version of career education as an elective or compulsory Year 10 semester subject. This subject is usually tied to work experience of one or two weeks in Year 10, with a further work experience of one to two weeks in year 11.

(8) Many of the schools in the project run study camps of up to a week for particular subjects or study skills in years 10 and 11.

(9) One school has structured the coordination of VCE students around home groups rather than year level coordinators to enable a more personalised approach to monitoring individual student progress.

(10) In all schools Career teachers and VCE teachers had prepared information booklets to inform parents and students of subject choices in VCE. At one school the monthly newsletter was used to outline a range of study and organisational skills required for success at VCE level.

- School Programs for VCE Students

Many of the programs listed above continue through VCE studies with additional programs such as trips to Melbourne for up to two weeks for career education, with visits to metropolitan tertiary institutions and the Career Reference Centre as well as orientation to urban life.

- School Size and Class Size

Many school staff, parents and students commented on the small size of the school and senior classes as a very important factor in effective retention of students to Year 12. Under these conditions it was easy to create and sustain a personalised, caring ethos within the school where students were given intensive individualised support in their subject choices as well as in their social, academic and personal development.

Student Work Experience

The perceptions of parents, students and Career education teachers indicated that work experience in years 10-12 was an important factor for some students in encouraging them to complete year 12 studies. For some it clarified career and subject choices by persuading or dissuading them to pursue a particular vocation. For others it provided an additional motivation to continue study at school. For a very small minority of students it persuaded them to leave school before the completion of year 12 in order to pursue full-time work.

Barriers to Retention and Participation in Year 12

Participants in the research project have identified the following interconnected barriers to retention and participation in Year 12:

Provision of Programs and Resources

Community Attitudes and Knowledge

Economic Hardship

Provision of Programs and Resources

- VCE structure and subject requirements

The VCE structure and work requirements have undergone a range of modifications from 1991 to 1993 with a reduction in the range and scale of work assessed in some subjects. The majority of school staff believed that there was a sufficient range of subjects in the VCE, especially in relation to technology units such as Technological Design and Development, and Materials and Technology, to cater for students not suited to traditional academic subjects. However, the structure and work requirements were perceived by a small proportion of teachers in the project as not suitable for all senior secondary students, especially those with an orientation to more practical problem-solving. One senior administrator from a school claimed:

> Some kids have tremendous aptitude in certain areas which VCE does not cater for despite the fact that the Ministry says you can modify your courses...Kids were dropping out in the first six months because they knew they had failed a unit and even though the practical side of their subjects was brilliant, they are just not suited to writing things down and keeping a journal and things like that.

- Cutbacks to Career and Vocational Education Provision.

Nearly all the schools studied in the research project have been affected by the proposed and actual reductions to school funding, with subsequent cuts to the monies allocated to career education programs, staffing, excursions to Melbourne and provincial centres and provision of relief teachers. Many of the programs reported in this study will have their future implementation significantly modified by these cutbacks. One school which currently has a full-time career education teacher is currently reviewing this allocation with the possibility of the position being given half the present weighting. Generally schools perceive vocational education as a lower priority than the nominated national curriculum areas.

- Number of Subject Offerings in Smaller Schools.

While most school administrators and teachers in the study believed that the majority of student subject requirements at VCE level were being met by current provision, one administrator speculated that there might be advantages in the development of a local VCE college of 300 students in terms of broader subject choice and facilities for students in the region.

Community Attitudes and Knowledge

- Community Culture and Values

Teachers and administrators at more than one school believed that the traditional culture in the town with its heavy emphasis on sport and a social life for teenagers was a barrier in some cases to successful participation in VCE. As one administrator commented:

> Our kids here have to make the commitment to give up sport if they are going to be successful. It's not just the sport, but rather all the injuries and the travelling.

- Koori Students and Role Models

Teachers and Koori educators reported that a significant problem in terms of the retention of Koori students to year 12 was the lack of positive role models of successful students at this level. A school with a Koori population of over seventy students had difficulty retaining Koori students into VCE because such a progression was not seen as routine for these students.

- Lack of Local Models of Career Diversity

Many staff acknowledged the problem that effective retention to year 12 often required students to have clear post-school goals in terms of career choice. However, many students were limited by their lack of first-hand experience of career options or their sense of community expectations. As one teacher put it:

> Most middle class professional people in the town are unfamiliar with the trade area, would not know what a tram driver does, never seen one in action. In many ways we are dealing with abstract tertiary courses, where they (the students) don't really know where they are leading, and we have had in the past this huge group of teachers going through and accountants. Because they know that those professions exist, and they know what they are like. But kids in the country really miss out in a wider range of newer professions, newer careers.

This narrowness of potential career options was seen as indicative of the general problems that faced all rural students in their participation in VCE. Agricultural and horticultural communities, especially at this time of economic recession and the withdrawal of services to larger towns and cities, provided limited local models of career diversity. This had a subsequent effect of tending to restrict students' retention to year 12 through an absence of clearly defined post-school goals.

- Economic Hardship

This study confirms the findings by Sheed and Lloyd (1990) that the costs associated with student retention to Year 12 and with transfer to tertiary or further study were a very significant barrier to some students' participation. School staff reported that this was a factor in non-retention of students in all the participant schools.

Factors Affecting Girls' Subject and Career Choices in Upper Secondary School

This section reports on the factors relating to girls' choice of subjects in the senior secondary years in rural areas and the relationship of these choices to a range of school and community issues impinging on future career options.

The study has identified the following factors as central to the subjects choice/career option process for girls:

Specific Programs for Girls
Career Awareness Programs in School
The Role of the Careers Counsellor
Careers Rooms
Work Experience Programs
Career and Work Opportunities in the Community
Attitude of Parents and Community Members

Specific Programs for Girls.

Half the schools in the study ran specific Career Awareness Programs oriented to girls and to non-traditional career and school subject choices. One school, for example, ran a series of girls-only seminars in year 10 and 11 with female presenters representing a diversity of careers. Another school has been nationally recognised for its success in the field of equal opportunity. This school has participated in the first and second phases of the Trades Women on the Move project which involved non-traditional career options. However, as the Equal Opportunity Coordinator at the school comments, "The barriers to it outside the school are still very strong, with parental and community attitudes towards it as not an appropriate career for girls our major stumbling block". Several schools have also encouraged their students to watch equal opportunity programs through interactive television.

Several schools reported that while they did not run specific programs for girls, the diversity of courses, including an increase in technology subjects, tended to cater effectively for non-academic students of both genders. Materials and Technology with a focus on fabric, for example, was popular at one school with both boys and girls. Some schools ran girls-only classes for Practical Physics, Mathematics and Physical Education at Years 9-10 and girls-only night classes for non-traditional subjects. However, as one principal reported, this measure was really only a 'band-aid' approach that treated the symptom and not the real 'disease' of sex stereotyping within the broader community.

Career Awareness Programs in Schools.

In general Career awareness programs in the schools focused mainly on Year 10 but often also extended into Year 11. In most of the schools in the project very little was done prior to Year 10. The majority of the students interviewed at Year 9 indicated that they had some knowledge of careers programs but were very vague as to their format or purpose. The interviews with students indicated that girls responded more positively than the boys to the impact of the programs on their thinking about subject choices with ultimate career choices in mind. Some schools included a 'Careers Camp' as part of the overall program which often involved a week at a residential college in Melbourne. Where this occurred Careers Awareness programs were generally seen as being highly effective.

The Role of the Careers Counsellor.

This factor was mentioned most frequently by both girls and boys as being important in subject choices and career orientation. The results however were uneven. From the interviews with students it seemed that where a careers counsellor had occupied the role for some years then students demonstrated a clear valuing of the role. However, where the person had occupied the position for a short period of time then students seldom mentioned the "Careers Counsellor" as having a dominant place in their thinking. The observation provided a clear impression that the 'careers counsellor' per se was perhaps less important than the role being personalised for students over time.

In general the interviews indicated that girls more often than boys valued the personal factor in dealings with careers advisers (where officially termed as such or not). This was particularly noticeable in one of the schools where there were a number of teachers with a long history of service to the school. It was clearly evident in this situation that girls in particular placed a lot of trust in the accumulated wisdom and expertise of these teachers.

Careers Rooms

Closely associated with the role of careers advisers was the effectiveness of specially equipped 'careers rooms'. In the schools surveyed these varied from shelves set up in the Careers Adviser's office to a special room as an annex to the library. In one school a portable classroom was devoted entirely to career education and was well stocked with careers information including videos. In this situation students tended to regard the careers room as a place they could come to in spare periods and browse through materials. Where booklets are displayed on shelves as part of the career teacher's office students felt less inclined to go in and take the time to read through these materials. The comment of one Year 12 student illustrates how the combination of a well established careers adviser and careers room can be very effective:

> The careers room - and Mr. X, he's really obliging and helps, like he works out what you like and ....I sort of well everybody thinks I'm sort of good with people, talking with people.

Work Experience Programs.

All schools in the project saw these as an integral part of their career education programs. Usually these programs occurred in Year 10 and were split into two separate weeks involving a different experience in each week. One school provided for work experience at the end of Year 11 after the formal program had been completed. This often enabled students to continue into paid Christmas jobs and in some cases provided part-time employment in the following year. Girls in particular appeared to benefit from this program as many of the jobs were in the shop assistant and tourism areas.

One school in a more isolated area organised the work experience program around a one week segment in Year 10 (usually in the local environment) and a two week segment in a city environment (examples noted were Melbourne, Geelong, Bendigo and Adelaide). This program occurred in Year 11 and students interviewed regarded this experience as particularly useful. Not only did they gain a worthwhile block of work experience but they also developed personal management skills related to living in a city environment.

Career and Work Opportunities in the Community

More than 90% of students in Years 11 and 12 had a reasonably clear perception of career pathways and the subject combinations needed to realise these options. For girls these choices tended to fall along traditional lines involving nursing, welfare work, social work and to a lesser extent, teaching. In two areas employment in the local tourism industry figured highly for girls but not for boys. The two communities concerned depend on tourism for a large part of their commercial activity. One career teacher commented that there was general pattern of change in career choices for both boys and girls. Rather than farm work and apprenticeships boys were now tending to move towards diverse career choices in terms of tertiary study. In the past girls had tended to pursue traditional careers such as nursing, teaching and hairdressing, but these choices now included an increased focus on art and design, business, and the hospitality and recreation industries.

In almost all of the career options involving further study students were aware that they would need to leave the local community to achieve this end. In many of the responses involving students from horticultural areas or dairy farms the process of going on to further study was seen as inevitable as the marginal scale of economic viability on these farms made it virtually impossible for these students to think of a future working on them.

In one school in particular the work opportunities in the local community suitable for girls were considered to be very limited because of the rural decline and the impact of the recession. Many interviewed at Years 11 and 12 felt that this was a strong factor in a decision by girls to stay on and complete Year 12 and move away from the region and go on to tertiary education. Some of these respondents felt that the option for boys were more restricted and that there was an obligation for these students to stay in the community and help out on the family farm.

Other male students from this school and another school with a similar farming population felt that the most effective career pathway would be a skilled trade which could eventually be used on the farm.

In at least two schools girls said that they were less likely to leave the district completely and indicated that they would attempt to find employment in the town.

Attitude of Parents and Community Members

There was a perception of very strong support across all schools in the survey relating to parents assisting their children to stay on and complete Year 12. The reasons behind this perception are quite complex but broadly they may be tied back to economic concerns about the local community and the opportunities for a better lifestyle. This study confirmed the crucial role of parental support in girls' retention to year 12, a finding supported by Eatts and Symons (1993) and Poole, M., Langan-Fox J., and Ciavarella M. (1992).

The majority of students indicated that their parents had not progressed past Year 10 when they were at school and that these parents wanted their own offspring to have a much better education. A statement by a Year 11 student is typical of this attitude (in response to a question about going on to Year 12).

> 'My parents they just wanted, they just sort of want all of us to do it. They didn't like when my brother didn't do it. So I know what they want me to do, so I think that's sort of making me do it.'

The general economic downturn figured prominently in students' responses. In response to a question on why they were staying on to Year 12 many students said "Well there is nothing else to do." or "My parents told me I just have to go on."

Concluding Remarks

This section of the report examined factors which impinge on girls' perception of study in the senior secondary years and the relationship of these perceptions to subject choice and career options. While it is difficult to detect clear patterns across the range of schools surveyed there are nevertheless some interesting trends. These are as follows.

1. The role of 'careers counsellor' appeared to be very important for girls in particular. This role might be performed by any teacher with sufficient standing or experience but students need to feel secure in the support and guidance offered.
2. Work Experience programs were regarded as an essential part of careers and subject choice preparation. While girls tended to choose work programs along fairly traditional lines some chose programs in professional areas totally outside their normal experience. This often led to the structuring of subject choices to enable these students to pursue tertiary study in these areas.
3. Rural decline and the recession has had a major impact on career choice generally. The importance of getting the 'right' subject mix in years 11 and 12 was clearly indicated by girls so that they could complete Year 12 and move away from the region. Some of the girls felt that there were fewer community restraints on them in this regard. Boys were often expected to stay in the community, for example to help out on the family farm.
4. There was an almost universal acceptance by all students (boys and girls) that their parents expected them to stay on to complete Year 12 unless secure employment became available.

Factors Affecting Post-School Options

The following linked factors have been identified as influencing students' post-school options in terms of further study or work possibilities:

Parental and Community Expectations

Geographic Isolation

Role of School in Subject and Career Advice

Parental and Community Expectations

- Parental Perceptions of Children's Future Work Prospects

Parental support has been identified elsewhere in this report as a crucial factor in students' retention to Year 12. Most parents interviewed believed that there were very few or no future work prospects within the local community for their children and were encouraging them to complete Year 12 and then attempt further study or seek employment outside the local area. A high proportion of parents had not attained VCE or equivalent levels of education and therefore believed they lacked expertise in advising their children on subjects choices or study skills in VCE. As a result they tended to provide general support and rely heavily on the school's expertise in career and subject advice. As a result this makes the school's role crucial in terms of subject prerequisite guidance to students, the development of study skills, pastoral support, and general career advice. While most parents believed there were no local employment prospects for their children one exception to this pattern was the sub-group of parents in one school who believed that their children could gain local employment in the local tourist industry and hence stay in the town. However, these parents also believed that successful completion of year 12 was absolutely essential to these employment prospects.

- Parental and Community Influence on VCE Subject Offerings

Staff perceptions of this influence varied across schools. Teachers and administrators in some schools believed that the community expected the school to offer traditional academic subjects such as Mathematics and Chemistry rather than the newer subjects such as Information Technology, other Technology subjects and Asian languages. VCE subject offerings in some participant schools could therefore be characterised as generally traditional ones. This was explained by one senior staff member at a school in the following terms:

> Despite what the government says about the breadth of course that schools have got to offer, this enormous breadth, like LOTE, I don't believe the community thinks that. Most parents believe the school gives their kids a fair offering and are happy with the range the kids were able to do...How many wheat traders actually talk to the Japanese or the Chinese. I mean, let's face it, as a wheat grower, you don't actually do the bargaining. You rely on people in Melbourne to do that.

Clearly this diversity of subject offerings affects the post-school options of students. One school principal believed that the broad provision of practical subjects at VCE level at the school was a strong factor in effective retention of some students in VCE and also encouraged some of these students who in the past might have left school at Year 10 to pursue post-school further education in Art and Design study fields.

Geographic Isolation

This is universally recognised by school staff and parents as a critical factor in post-school options of students. The generally lower participation rates of rural students in tertiary and further education can be traced to a range of factors, but certainly geographic isolation from Higher Education sites was viewed by many staff and parents as the most important negative factor in post-school options. Clearly there is a considerable additional cost burden on families to support their children in meeting living-away-from-home expenses. One career teacher made sure that parents were aware of these costs when their children were in year 8, so that long-term planning to meet this cost could occur.

Many teachers and administrators commented as well on the range of problems students have in adjusting to living in bigger cities. Career teachers at several schools commented on the continuing failure of some better-than-average students to adjust to tertiary studies in Melbourne. As one VCE coordinator said:

> In the last couple of years I have been very disappointed with several of our better students going to Melbourne and pulling out within three or four months, because they were good kids here and they got a good score and I thought fairly mature students I was really disappointed for them, but they obviously either chose a course that there weren't suited to or, and this is the case of the three students I'm thinking about, they were homesick.

Role of School in Subject and Career Choice

- Conceptualisation of Work and Career Futures in Australia

As indicated already, for a range of reasons the school plays a crucial role in the VCE options, subject choices, and post-school aspirations of many rural students. This role is currently carried out in a context of considerable uncertainty about the future viability of various kinds of employment in both rural and urban settings. The restructuring of much primary and secondary industry, the increasing casualisation of the work force, and the shifts to greater employment in the tourist, leisure and information industries in Australia have produced considerable challenges to the provision of effective career advice for this rural student group. The recent Mayer (1992) and Finn (1991) Reports have theorised the future of broad employment in Australia in terms of the need for increased flexible generic rather than specialist skilling and reskilling of the current and potential work force. Career advice in the schools in the study generally acknowledges a consequent double focus. An effort is made to match students' individual aptitudes and interests to existing specific work or career opportunities, while at the same time students are encouraged to 'keep career options open' through diverse subject choices.

Distance Education Programs in CEP Schools

The eight schools studied in the project are the recipients and presenters of a range of distance education courses, subjects and special programs. This provision includes interactive two-way television programs such as the Homework Hotline with teachers as guest presenters of VCE subjects and topic advice. Other programs include correspondence school delivery of subjects through print as well as audio and fax-linked conferences for subjects where schools are formally linked by a cluster system.

Teachers and administrators at five of the participant schools considered the use of telematics to be integral to their VCE program and as an effective means to supplement subject offerings and increase student groups to viable sizes. The telematics network was perceived as reinforcing a sense of collegiality between schools. The other three schools perceived telematics to be only a very minor part of their course offerings.

Perceived Positives of Distance Education

- Increased Subject Choice

Telematics offered VCE students a range of additional subjects. Some, such as Technology units, were provided through cooperative links and shared resources with other schools supported by personal visits to recipient schools by the presenters of the subject. More than one senior administrator in schools believed the telematics provision had significantly expanded the number of viable VCE subjects for students in the region. One principal claimed that through further innovative delivery methods and additional training for staff telematics could be developed to a greater extent to meet the needs of rural students.

- Student Success Rates with Telematics Learning.

A principal claimed that Telematics teaching had proved very successful because of the following factors:

> Because of the amount of work in delivery by the teacher it is always exceptionally well taught, and because of the fact that the teacher has to concentrate more, it is usually very effective. We have got very good results from this method.

Criticisms of Distance Education

- Problems with Delivery

Several teachers cited a range of problems including technical failure, problems with inappropriate lunch-hour times for delivery of interactive television programs, and the lack of expertise of teachers and students in using the different technologies effectively. One teacher who has used audio and video links to teach and receive subjects from teachers in other schools claimed that the medium tended to lose effectiveness significantly once group sizes exceeded eight students.

- Demands on Students and Staff

Many of the teachers with first-hand experience of telematics and Correspondence school delivery of subjects pointed out the need for participant students to be highly organised, strongly motivated, and very capable independent workers. This perception was confirmed by many students in the study. The increase in the cost of subject enrolment from $30 to $90 was also perceived as a problem in terms of access for some students. Teachers perceived that there was a strong need for extensive face-to-face teacher support to supplement this delivery method. There is clearly a need for strong in-service support for teachers in using this approach, a conclusion supported by D'Cruz (1990).

Recommendations from the Findings and *abbreviated commentary*

Recommendation 1.

That education systems recognise the centrality of effective career and subject counselling to students in their retention to year 12, publicise the relationship and provide appropriate staff and resources to rural schools to support the activity.

The current and projected staffing budget cuts for secondary schools is likely to have a very serious negative effect on the quality of career and subject advice relating to student retention to VCE. Many of the positive features of this career education provision listed in this study are currently in jeopardy.

Further, the current economic recession is having a profoundly negative effect on rural towns in Victoria, which, as the report highlights, has consequent effects on students' career choices, possible local work experience options, and retention to year 12. The recession is ironically enforcing far greater student participation in schooling to year 12 and beyond. This has the effect of increasing significantly the work involved in effective career education in rural schools. Many students now remain at school to Year 12 without being clear about post-school goals or positive about post-year 12 options.

These factors combine to reinforce the importance of this recommendation.

Recommendation 2.

That the Country Areas Program continue supporting at cluster and statewide levels the development of diverse subject offerings and modes of delivery to give students a broader range of options and subject experiences.

The effectiveness of career education programs in schools is partly dependent on the diversity of subject choices available to rural students before and during VCE to guide their career decisions. The maintenance of diverse subject choices at these levels of schooling, including traditional academic subjects as well as more practical subjects, is an important issue in terms of student retention to year 12 and effective vocational pathways.

Recommendation 3.

That education systems provide professional support and resources the effective use of distance education options in teaching and learning.

The continued development of a range of means of providing learning at a distance is a further important element of providing a broad curriculum to rural students.

Recommendation 4.

That the exemplary practices of schools in the study, including work experience practices and close links between school and community, in relation to career education be publicised widely by CAP groups and education systems.

Career education programs and work experience in years 10-12 are very important factors for many students in encouraging them to complete year 12 studies and in ensuring they are successful. These programs and their success should be more widely acknowledged, publicised and protected in cuts to education budgets and school programs that appear to discriminate poorly between good and less effective activities.

The school linked with extensive community participation in all aspects of the schools' operation were clearly of fundamental importance to effective student retention to Year 12 and subsequent pursuit of career options.

Recommendation 5.

That schools and education systems contribute collaboratively to strategies that integrate work and career education into all curriculum areas.

The range of programs and activities undertaken in these schools and described in detail under the section on School Programs and Structure in Relation to Career Education make it clear that such integration is important to students' retention and success.

Recommendation 6.

That rural schools continue to support and publicise successful practices in terms of expanding girls' options in relation to subject choices, career pathways and post-school choices, such as indicated in this study.

A range of practices associated with improved retention and life options for girls in rural schools should be supported. These include those related to: specific programs for girls in non-traditional school subject and career choices; career awareness programs for students, teachers and community members; retaining and supporting experienced Careers Teachers and areas set aside as careers rooms; getting appropriate subject mixes in years 11 and 12; and supporting work experience programs, particularly those providing non-traditional experiences for girls.

Recommendation 7.

That a systemic approach to career education be implemented throughout Victorian secondary State schools where the role of career education is strongly linked to the VCE structure and curriculum, and monitored and publicised by School Councils and education systems.

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KEYNOTE ADDRESS

KNOWLEDGE DIFFUSION IN THE CONTEXT OF DEVELOPMENT IN RURAL AREAS

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INTRODUCTION

Rural Community Development has been defined in many ways. It is generally agreed, however, that it encompasses social, economic, political and cultural enhancement for the purpose of improving the quality of life of rural citizens and that it must occur within a framework of participation, respect for diversity and self-determination, whether the particular development project utilizes internal or external resources (Daley & Wong, 1994; Cary, 1973).

Development, when treated as a normative concept is usually synonymous with improvement and social transformation (Christenson, Fendley & Robinson, 1989). In this process, the role of community leadership in facilitating the dissemination of new ideas, the acceptance of new roles, the discovery of new solutions or the replication of old ones, whether introduced into the community by insiders or outsider, emerge as central. By definition, rural community development entails the introduction, dissemination and adoption of new ideas, technologies, programs or other changes by local people (Cawley, 1984; Huie, 1976), or the re-discovery of old ones for new and different purposes. As a process, rural community development is closely allied to innovation, knowledge diffusion and transfer of technology. However, as suggested by Tarde (1903), the diffusion of knowledge is not an easy process. Unfortunately, of hundreds of novel ideas or innovations introduced at any one time, very few will spread while the rest will remained unnoticed.

This paper will focus on the process of innovation in the context of rural community development. Knowledge diffusion theory and practice will be used to suggest basic steps that might be useful to the rural innovator. Can we identify basic principles that can be used in rural development when introducing a new idea, replicating an old one or simply spreading a concept, principle or practice which may have worked elsewhere? What can rural community leaders and professionals do to energize the process of replication and discovery of new knowledge in rural areas? In all spheres of life, but particularly in the human services, we cannot afford to discard "gems" that may have worked elsewhere simply because we are unable to translate them into helpful local practices. Yet, the energies of the innovator often go into finding the "gems" while the process of applying them, cultivating them and letting them take new roots goes unattended.

Even though seminal work on knowledge diffusion originated in the rural field (Rogers, 1983; Rogers & Shoemaker, 1971), rural innovators have often disregarded existing, predictable patterns of knowledge diffusion (Chatterjee & Ireys, 1979; Watson, 1983). Innovators have frequently been perceived as eccentrics or people with "hairbrained" ideas (Smale, 1993), whose processes, though at times successful, may not deserve systematic study and attention. Yet, particularly in the human services, where "one is dealing with human beings with deep and pressing needs, the disparaging of innovation is an immoral position" (Governors Center, 1991:4). This paper will analyze knowledge diffusion principles and suggest steps that can be replicated easily and can provide frameworks and blueprints for new developments in rural areas, not only in the human services but also in a variety of other fields.

THE PROBLEM OF CHANGE AND THE MANAGEMENT OF INNOVATIONS

Change has always been and will continue to be a certainty in rural areas. Broad societal trends ranging from the delivery of rural mail, the mechanization of agriculture, the viability of the family farm, the introduction of industry, from textiles to shoes and computers, the transformation of the one room school house, the advent of radio and television, the wax and wane in the use of rural midwives, or more broadly speaking, the appreciation or depreciation of rural life styles, have been the daily reality of many rural citizens. What is perhaps new is the speed at which changes are introduced in modern life, their scope and pervasiveness. Modern changes have deeply affected human relationships (Fitchen, 1991). In the human services, lack of resources have pressed professionals in all fields to search for new and creative ways of insuring that rural people receive the degree and quality of services they deserve. Citizens and professionals in rural communities have joined the search for new ideas, new knowledge or new programs that can alleviate their problems and satisfy their needs. Change and innovation have certainly become the order of the day.

Furthermore, as modern communication has rendered the whole world accessible, the search for the programmatic "jewels" which might prove useful in meeting the ever-increasing needs of the countryside has taken on international dimensions. In the U.S., for example, federal, state and local governments, voluntary agencies and for profit corporations are actively searching for new approaches in the human services, across national borders.1 It can safely be assumed that the same is true in other countries. In relation to social problems, Schor (1988) has suggested that the best way to combat helplessness is to identify innovations that help and encourage their diffusion. It has become apparent across the world that, as new knowledge is created or old knowledge is found to have new applications, the art of spreading knowledge and managing innovation has become more crucial in urban and rural communities (Smale & Tucson, 1992). We know, however, that changes cause anxiety; thus, it is highly probable that innovations will encounter rejection. As Alfred North Whitehead suggested, the art of progress, improvement, or, for that matter, the art of development is "to preserve order amid change and change amid order" (Whitehead, 1988/1933). The philosopher understood the fine complementarily of change and stability. Indubitably, as many community development veterans know, a good innovator must preserve some sense of order which can allay the anxieties of those who participate in the process.

DEFINITIONS AND BASIC THEMES

Before we proceed, a few definitions might be useful. The term innovation simply means something new; change implies something different from the established order or the common pattern. While many innovations are the direct consequence of new discoveries in science or technology, many are only the result of applying very old principles in relatively new ways or in new contexts. An innovation is in and of itself neither positive nor negative. An innovation only takes on positive or negative qualities as we pursue it, searching for solutions to an existing problem. Having confronted a problem which resisted former solutions, a change or innovation allows those involved in the process to explore alternative ways of solving it.

Among the better known work on knowledge diffusion and the transfer of innovations is that of Rogers (1983) and Rogers and Shoemaker (1971). Their work has given us a framework for synthesizing some of the characteristics of the innovations themselves and some of the highlights of the process of innovation which might be helpful in disseminating new ideas in rural areas. At a more abstract level, Dunn, Holzner and Zaltman (1985) have identified conceptual premises that explain the nature of knowledge use. Finally, based on the work of Rogers (1983), Dunn, Holzner and Zaltman (1985), and on research experience with projects of knowledge diffusion in rural areas, Martinez-Brawley (1993) suggested steps that could be followed to achieve more successful rates of knowledge diffusion and innovation.

Based on what we know about rural communities and rural development, this paper will focus on analyzing and illustrating how three selected characteristics or attributes of innovations dovetail with the more abstract principles of knowledge diffusion and with concrete steps suggested for the innovator. In turn, the following will be discussed

1. Knowledge interpretation—Relative advantage—Innovation marketing;
2. The systemic nature of knowledge use—Value compatibility— Aids or constraints in innovation diffusion.
3. The transactional nature of knowledge— Complexity, triability and observability—Networks and concept simplification.

Figure 1 summarily presents how the conceptual premises of the process of knowledge diffusion, the characteristics of the innovations themselves and the steps of the innovator run along parallel lines. While the characteristics of the innovations selected do not constitute an exhaustive list, they were chosen because they are extremely compatible with well established principles of rural development. Particularly in the rural human services, where economic or commercial motives often provide less encouragement in the adoption of innovations than in other areas, it is useful to study processes that can enhance the diffusion of improved ways of caring.

KNOWLEDGE INTERPRETATION — RELATIVE ADVANTAGE — INNOVATION MARKETING

Those who study the sociology of knowledge or the field of knowledge utilization report that knowledge is always interpretative. In other words, knowledge, once discovered, or innovations, once produced, do not speak for themselves. They must be interpreted and communicated by various stake holders before they will be utilized or translated into practical action (Dunn, Holzner & Zaltman, 1985; Lazarsfeld, 1975). Regardless of the nature of the new knowledge, interpretation is part of the utilization cycle.

However, is some knowledge more amenable to interpretation than other? Are some innovations more likely to be caught in the whirlwind of the utilization cycle than others? In the early development of innovation theory, researchers believed the objective status of an innovation (its intrinsic worth or merit) on the one hand, and the personal characteristics of the potential adopters (their socio-economic or educational status, their identification with traditions) on the other, were major factors in the rate of adoption. Thus, scholars often arrived at sweeping and perhaps mistaken conclusions about a particular group's or region's propensity to use new knowledge or adopt new technologies. A perfect example of this was the over-generalization that rural areas were absolutely reluctant to accept innovation and change, a premise that has been shown to be not always correct.

Rogers'(1983) studies placed much greater significance on socio-psychological dimensions, that is, the perceived characteristics of the new idea or practice rather than on its objective status. Ostlund (1974) corroborated that Roger's socio-psychological attributes of innovations were good predictors of adoption. Pandey and Yadama (1992) further suggested that relative advantage, compatibility and complexity were probably the strongest. Russell and Nicholson (1981) stressed the importance of participatory decision making.

Relative advantage refers strictly to the way in which an innovation is perceived. If a new idea or innovation is perceived as being better than the idea it replaces, it will probably be tried out and even adopted. The strength of the objective evidence that it works does not seem to make a fundamental difference at the start, but the degree to which a person or community feels rewarded or disadvantaged in adopting an innovation or new technology does.

Cost of the new idea is often a very important factor in the perception of advantage or disadvantage. Changes, which might be advantageous in urban areas, for example, are often disregarded in rural areas because of cost factors. It was recently suggested that the cost of implementing new EEC piped water regulations in the Highlands of Scotland was so high, that the Chairman of the Highland Forum openly suggested that providing bottled water for drinking would be cheaper (Bryden, 1991). Clearly, such a change proposal would not be high on relative advantage even if it had been viewed by the leadership as an improvement.

Before perceived advantage among feasible alternatives can be discerned, there are probably two pre-requisites. The first is knowledge of the innovation and the second is a degree of dissatisfaction with the existing state of affairs. Dissatisfaction with the current state of affairs is fairly spontaneous. We know, however, that, knowledge is interpretative; consequently ideas do not transfer by themselves; committed innovators and product champions of the new knowledge need to have not only knowledge of the innovation but must perceive one or more of its relative advantages, because the proponent of an innovation must carry out a variety of marketing tasks.

In marketing an innovation, the proponent of the new knowledge, technology or program will need to first identify the perceptions and attitudes toward the innovation and then proceed to clarify its relative advantage. In the human services, the innovator is likely to be dealing with changes that represent a social/communal cost and but render mainly a non-financial or service benefit for the individual or community (Agarwal,1983). Furthermore, the decision of whether or not to consider the innovation is often in the hands of those who may not use it, and thus, may not see the direct advantage of the new idea. Consequently, communal consensus is likely to be an important marketing factor. For example, the relative advantage of opening a new day care facility for children in a small town may not be apparent to an older or well established community leadership. On the other hand, the consensus and cohesiveness of the young might convince the leadership of the relative advantage of having the younger constituents on their side; their support might be needed to put into effect other efforts that might benefit, more directly, the leadership. Even the objective evidence of better cared for children, or of reduced social costs in the long run, may not necessarily be the best marketing approach. The better technique might be to market the idea first among the potential adopters and let their consensus and cohesiveness play a role with the leadership. Indirectly, the leadership may recognize a relative advantage for themselves.

In a recent innovation project in rural Pennsylvania, the idea of "integrated services", that is, single agencies that provide a variety of personal social services in the rural counties, was the object of a knowledge diffusion and innovation project (Martinez-Brawley & Delevan, 1992). Objective evidence that showed integrated agencies as advantageous was collected but so was evidence that showed that integrated agencies were not any more effective or efficient. Administrators and providers who had both positive and negative experiences with integrated agencies debated the concept. In the end, those who moved to apply the new idea in their counties were those who had begun by being more favorably disposed toward it because they believed the cost savings and improved access factors were an obvious relative advantage. Additionally, those who perceived the new model to have real financial and political advantages became the champions. Increased knowledge and familiarity with the new idea helped solidify positive perceptions and move marginal ones in a positive direction rather than change those who were vehemently opposed to the concept. In the human services, where few innovations or new ideas can be shown, with certainty, to be improvements over the ones they replace, perceptions of relative advantage are particularly important.

Finally, a very important marketing approach to an innovation in rural communities is the contagion effect. Capitalizing on the very close social networks of most rural places, whether in reference to individuals, to organizations or to communities, the rural innovator needs to identify a few enthusiasts for the given innovation and make sure that the new idea is publicly displayed, talked about, discussed and demonstrated. Even intense debate in reputable public forum can create a positive contagion effect, provided the debate does not obscure all the potential political or other relative advantages. Again, drawing on the example of a recent Pennsylvania project on the transfer of "community oriented and patch based services", a human service delivery model from the U.K. (Martinez-Brawley with Delevan, 1993)2, the contagion effect became apparent. When one county director, who was a product champion, began to receive substantial press coverage (both, positive and negative) for his innovating interests, many other directors began to discuss the perceived relative advantage of this coverage for their own organizations. This prompted a wave of interest and experimentation with the new idea and resulted in the eventual diffusion of the innovation to two other rural counties.

THE SYSTEMIC NATURE OF KNOWLEDGE USE—VALUE COMPATIBILITY—AIDS OR CONSTRAINTS IN INNOVATION DIFFUSION

A second principle in knowledge diffusion suggests that knowledge use is systemic, that is, the dissemination and use of innovations or discoveries is constrained by the social, cultural and organizational realities of the new context. This is an important principle which applies to rural and urban areas alike. As already mentioned, rural areas have been said to be particularly resistant to the adoption of new ideas. Traditional values and mores, even in highly industrial societies have been cited as causes. Yet, when one examines innovation from the perspective of relative advantage, other explanations emerge for rural areas. In the U.S., for example, educational levels and local authority's investment in rural education have remained low in many rural communities. Rural schools are often unable or unenthusiastic, it would seem, to invest in new educational approaches or technology. Johnson (1991) has argued that two important reasons for this under-investment is the declining number of jobs in rural communities. Lack of jobs leads to perceived (and real) low return on educational investments for individuals and to disincentives for rural schools, inasmuch as they do not reap the benefits of their investments because of rural out-migration. (Rural Sociological Society, 1993). Contextual forces often provide, if not a justification, at least an explanation for resistance and for difficulties encountered in the dissemination of new knowledge, programs or innovations.

Furthermore, because knowledge use is systemic, the value compatibility (Rogers, 1983) between the innovation or program and the specific context, needs to be determined carefully. A survey of the literature on knowledge use found that "researchers and users belong to separate communities" (Beyer & Trice, 1982:608). Value and cultural discrepancies between the developers of knowledge or technologies and the users of the product have often been profound. For example, testing the rate of adoption of new wood stoves in rural Nepal, Pandey and Yadama (1992) ascertained that cultural compatibility between the technology, however simple, and the user was the major factor in determining stove use. Nepalese women found that the new stoves were a problem in preparing some standard dishes and were also incompatible with their pots and utensils. Obviously, in designing the new stoves in a community development project, customization of the technology to the users' needs and preferences should be a central concern.

The situation is not dissimilar in the human services; in fact, it can be more complex. Human service innovations, even administrative ones, just like stoves, result in changes in the action patterns of the users. Unlike innovations such as household insulation, which, once installed, require no alteration in the homeowner's action patterns to achieve economies (Darley & Beniger, 1981), human service innovations require a great many changes in the action patterns of the user. Changing the model of provision of rural services from a variety of specialized agencies to an integrated one based in a school, for example, would require modifications in the action patterns of many people. The daily patterns of the "users", whether defined as the social workers themselves or the clients/consumers, would undergo change. Innovators and product champions of new knowledge need to view the process of knowledge dissemination as a collaboration or transaction between many parties. They need to assess the fit between the new idea and the many parties involved in the new context.

In contouring the innovation or new knowledge to the local situation, objective evidence that the innovation has been tried and works, preferably in similar surroundings, becomes more useful. The more locally credible the evidence, the more likely that the user will be able to identify with the new idea. In rural areas, a program that has been shown to work in an urban area will be far less attractive to the user than one which can boast of broad rural application. This will be because of both, perceived relative advantage and compatibility.

Issues related to the naming of the innovation are discussed in the context of making it compatible with the new surroundings. While innovators may believe that the names they give to their projects reflect the essence of those projects, localites (Rogers, 1983) must develop names which fit their linguistic patterns and meanings and reflect positive rather than negative local experiences. In adjusting the innovation to fit the local system the innovator is following principles of community development that stress local decision-making.

In rural areas, one way of testing compatibility is to bring the discoverers or inventors, the product champions and the users into close contact. This can be through face-to-face interaction, workshops and seminars that bring together the various parties involved in the diffusion and encourage their exchanges. This process is not limited to testing compatibility but extends, as we shall see, to minimizing the complexity and enhancing the triability of an idea. Naturally, the process of exchange cannot be limited to the early stages of adoption; it must be nurtured so that it does not end with the assessment of compatibility but continues to the development of truly autochthonous or local solutions.

The example of two recent Pennsylvania projects come to mind. A 1991 project (Martinez-Brawley & Delevan, 1991)sponsored by the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly permitted two researchers to gather, in four intensive workshops through the course of one year, the administrative and political leadership of about twenty rural counties to explore the idea of more integrated human service agencies that would serve the needs of those counties. Through interviews, discussions and focus group techniques, the leadership explored the possible innovation, adapted it to their own contexts, modified it, re-named and explored the possibilities of its diffusion. What began as the consideration of a model of "integrated human services agencies" ended up as the diffusion of a continuum of local possibilities, from the very integrated to the specialized. The originally proposed name for the project was changed to reflect the thrust of the emerging consensus3.

While the original idea had been transformed, the doors of dialogue and exploration remained open for yet a second project which introduced, in similar fashion, the principles of community oriented social work from the U.K. to rural Pennsylvania. Of the original twenty counties, ten were ready to make an investment in the second project and four actually operationalized innovations, which took on different characteristics in rural Pennsylvania than had been the case in rural Britain (Martinez-Brawley, 1993). Any new knowledge applied or disseminated to a new context undergoes transformation; the final product is never the same, for new situations aid in the discovery of new relationships, the generation of newer ideas, and the transformation and re-invention of the old ones into programs that work for local users (Martinez-Brawley, 1993).

One final issue in relation to the systemic nature of knowledge diffusion must be considered. Particularly in the human services, innovations are not as structured or concrete as they are in technical fields. Human service innovations tend to be, in Gruber's (1977) words, "messy solutions to messy problems" (p.22). Not only will they be more difficult to maintain (because communicability and evaluation are more difficult for messy innovations), but also, they will have very pervasive systemic consequences. Innovators must be alert to assessing consequences in other parts of the system or even in other systems they never intended to impact. In rural areas, where the inter-connectedness of systems is significant, the intended and unintended consequences of new knowledge must be carefully monitored. For example, in certain rural Pennsylvania counties, when introducing decentralized, community oriented services through the use of patchworkers4, the question remained as to the additional demand for services the new technology would generate. Most rural county administrators anticipated that the presence of the patchworker would result in additional requests not just for social services but probably for educational, sanitary, medical and other services. The resolution of one problem often generates awareness of other problems.

THE TRANSACTIONAL NATURE OF KNOWLEDGE—COMPLEXITY, TRIABILITY AND OBSERVABILITY—NETWORKS AND CONCEPT SIMPLIFICATION

Knowledge dissemination is transactional. Knowledge dissemination is not a one dimensional process in which discrete pieces of information are moved from one party to another. In fact, neither knowledge, nor technology nor innovations can be said to be truly exchanged, marketed or transferred. "On the contrary, knowledge is in fact transacted among parties engaged in symbolic or communicate acts of negotiating the adequacy, relevance and cogency of knowledge claims" (Dunn, Holzner & Zaltman, 1985:2832-2833).

Knowledge can be transacted in a variety of ways. In rural areas, some important ways are networks, whether cosmopolite or localite (Rogers, 1983, p.200), professional or acquaintanceship. Networks form channels of communication through which innovations spread and through which the contagion effect already described is enhanced. Cosmopolite or professional channels (Rogers, 1983, P.200) are important at the conception and generation stages of new ideas or projects. Localite or acquaintanceship networks of communication play a key role in spreading awareness of new ideas and managing attitudes about them. In fact, the process of innovation becomes collaborative as all the parties and networks engage in understanding the new concepts. The collaborative aspects of knowledge diffusion dovetail with the process of community development and with the development of appropriate technology (Schumacher, 1973; Fear, Gamm & Fisher,1989). Innovators and product champions must engage in an exchange of ideas with the likely adopters. Effective exchange, suggested Gruber (1977) is started at the outset, not developed after the fact.

Complexity refers to the perceived difficult of the innovation. Triability refers to the degree to which an innovation can be tested either for effectiveness, cost, or even other dimensions such as comfort, accessibility, etc. Finally, observability refers to the potential outcomes. Will others be able see or experience the change? Will the situation change for the better in observable ways? Rogers (1983) emphasized that these dimensions have a psychological effect on the trial of innovations. How complex, triable and observable an innovation is perceived to be will determine the rate of trial and adoption. Clearly, the easier an innovation is to understand, the more likely it is that it might at least be tried.

As was mentioned before, interaction and proximity of all the parties involved in the knowledge diffusion process serve to test, not only compatibility with values and culture, but also to reduce the level of complexity and enhance the triability of an innovation. Schor (1988) has warned that in attempting to transfer an idea or a program, the innovator must focus on the basic concept, not the detail. Awareness of the basic principles of an innovation have been translated into high rates of triability. Even in villages where stereotypes of tradition-bound or conservative inhabitants were prevalent, increasing awareness of the new knowledge brought the stereotypes into question (Gartrell & Gartrell, 1979). This does not mean that awareness alone will result in triability; what seems to be the case is that simple, understandable and easily triable innovations, stand a better chance of being used by locals. Details are usually filed away or discarded by potential innovators. They become a kind of "noise pollution" in transferability. In human service agencies, where bureaucratic details tend to quickly overtake program management, it is only the essence of the program that can be considered transferrable. If simply articulated, a good idea will take on various shapes, as it is applied in various contexts.

An example of a key idea, succinct in its origin to be cited here is that of the use of promotores (or promoters) in many contexts and in many fields in the rural U.S., particularly, but not exclusively, where Hispanics constitute a large percentage of the population. The concept of the promotor was originally used in Spain. Promotores socio-culturales helped to engage local rural groups in the re-claiming their own traditions and lore immediately following the Franco regime (Martinez-Brawley, 1991; Brawley & Martinez-Brawley, 1990). The concept was also used in Latin America in the same socio-cultural sense and reflected some of the theories of Freire (1972). More recently, the concept of promotores has been transferred to the health field and reflects the work of health para-professionals who attempt to introduce improved health practices by drawing on local and traditional forms of healing. The promotores, in that sense, are no longer limited to the socio-cultural field. The basic idea has been disseminated to other fields and to broader regions. Each field and each region has adapted the concept to its own context. No details were ever needed for the adaptation of the key concept.

A recent project partnership between the University of Arizona College of Pharmacy and Arizona State University School of Social Work, entitled Nuestra Communidad, Nuestra Salud defines promotores as "lay health promoters who share with the client a social, environmental and ethnic subculture as well as the client's verbal and non-verbal language" (Slack, 1994). In this project, the promotores are viewed not only as preservers of local culture, as had been the case in the Spanish original, but as agents in the transfer of health practices and technologies. Naturally, not all concepts have such a commendable degree of simplicity inherent in them.

The concept of case managers is another example. One of the reasons for the variety of definitions of a case managers is that a basic concept, which had its roots in the early tasks performed by caseworkers, has been transferred, negotiated and re-interpreted in many local settings. While situations such as this add complexity to the human service vocabulary, they also create flexibility in knowledge application. In the end, the professional finds himself or herself enmeshed in a much broader web of application than the inventor may have envisioned. Additionally, these modifications and re-inventions of the knowledge have proven essential to maintaining the momentum for change. For example, in transferring patch models from the U.K. to counties in rural Pennsylvania, what finally emerged in one county was not a remote, rural, generalist patch, but a patch in a minority neighborhood of the biggest county town, operationalized through one of the specialized county agencies (T. L. Barley, Personal Communication, Dec 1st, 1993). (Parenthetically, questions about the tendency of social agencies to base the trial of innovations in minority communities could be raised here, for positive and negative reasons, but that needs to be the focus of a different debate.)

If a concept is simple, it will be used and diffused. But, it will also be changed, re-interpreted and can quite possibly become unrecognizable. As Rein and Schon (1977) suggested, we may do something new and, when done, finally ask, "how did we get here?". The practitioner who cannot live with this is denying the most basic practice assumptions in the field of knowledge use. The process of re-invention makes it essential for the innovator or user of expert knowledge "to identify real concerns and forestall narrow, self-serving ones" (Boggs, 1992).

SUMMARY AND CONCLUSIONS

This paper has reviewed the process of knowledge diffusion in relation to selected characteristics of new ideas or innovations. Steps an innovator can take in enhancing positive outcomes have been suggested. Parallelisms were drawn between the processes of knowledge diffusion and innovation and that of community development; particular rural examples were discussed.

Implied in the discussion was the fact that culture, that is norms, values, beliefs, assumptions about life, linguistic habits, etc., is a major determinant of how individuals and communities view the world and approach the realities of daily living. The strength of the daily reality, whether of rural people in a particular part of the world, or of professionals in a given social service agency, is often underestimated. Yet, new ideas or innovations disrupt that reality. New ideas can often go counter to or question individuals' basic social constructs, while attempting to modify their habitual actions (Berger & Luckmann, 1966). The biggest threat to the dissemination of new knowledge or the success of innovations in development is the resistance inherent in local social constructs and habitual actions.

Yet, as Gouldner writes, the social construction of individual and collective realities is not static but forever changing (Gouldner, 1976). Only a dynamic interpretation of social reality can permit the work of the innovator. Culture and habitual actions can be viewed as motivating rather than binding.

The challenge of the innovator is to identify the constructs through which the individuals or communities with which he/she works interpret their world. These social constructs must be understood fully in order to be influenced. The most basic and yet most fundamental task of the knowledge builder, transmitter or innovator is to work with the social construction of reality of those who will use, receive and presumably benefit from the new knowledge or program.

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Foundation initiatives related to innovation have been sponsored among others by the Aspen Institute (1993), the Synergos Institute (1992), the Mega Cities Project (1992). In 1989, the largest 475 American foundations awarded $ 563 million for research and demonstration. The Exxon Foundation IMPACT program was created to promote wider utilization of educational innovations (Backer & Shaperman, 1993).

The federal government has funded knowledge diffusion prospects through the National Cancer Institute, the National Institutes of Health, the National Institute on Drug Abuse, the Maternal and Child Health Bureau, the Children National Demonstration Program, the Administration of Children and families and others (Backer & Shaperman, 1993; Backer, 1991).

Community oriented social work or community social work is an approach to social work that uses local networks, teamwork by professionals, integrated service delivery systems, and user involvement. A basic definition appears in the Barclay Report (1982). A patch is a sub-organizational unit in a local authority (county) social services department. It is limited geographically and by population. The idea is to based in the patch a social worker who is conversant with the local community and relate in non-bureaucratic ways to local needs.

The originally proposed name for the project was "Human Service Delivery in Rural Counties in Pennsylvania. Barriers to Integration. Implications for Legislative Action". The final name agreed to by all participants was "Considerations on Integrative Structures, Conditions and Alternative Models for County Human Service Delivery". The final title reflected not only the reluctance to imply sweeping changes but also the broader continuum of possibilities participants needed to be able to re-invent concepts.

Social workers who deliver generalist services to delineated geographic regions. Patches are usually based on population but also take into account accessibility to the corners of the patch by the caseworker, familiarity of the worker with the patch culture, etc. (Martinez-Brawley, 1984). The term originated in the U.K. and was part of the technology to be transferred to Pennsylvania rural counties (Martinez-Brawley with Delevan, 1993).

PRESENTATIONS AND WORKSHOPS

RURAL COMMUNITIES AND SUSTAINABLE ECONOMIC DEVELOPMENT

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ABSTRACT

The paper uses four fundamental elements of community economic development theory to explore the options available for communities to work toward sustainable community economic development. The four elements are markets, resources, decision making capacity, and economic rules. By understanding these forces the community improves its capacity to manipulate them to the community's advantage. The concept of sustainable development is broadened beyond the more traditional physical-biological definition. The dimensions of time, space, marginalized social-economic groups, and dynamic economies are used to focus on how communities can build sustainable strategies. Sustainable community economic development is about changing perceptions and choices regarding community resources, markets, rules, and decision making capacity. The idea of new knowledge and reframing issues is offered as a method to create new options.

The quote "[I]n times of turbulence, the difficulty is often less the turbulence and more trying to deal with it using the old logic" has particular significance to our discussion. Some indicators of turbulence include perceptions of increasing numbers of dysfunctional families; social alienation; mixing of cultures from political and economic migrations; shifts in centers of economic power; and pressures on resource endowment to meet the needs of current and future generations. I'm sure other sources of turbulence can be easily enumerated, but is not necessary for our efforts.

Table 1 contains one list of old and new logic that appears to have substantial influence on how we might achieve sustainable development. An important way to look at Table 1 is as a statement of two contrasting paradigms about how our socio-economic-biological system works. No small part of the current debate is about which paradigm most accurately reflects the conditions of today and desires for tomorrow. Obviously, Table 1 is a bit overdrawn to expose what I believe to be the different perspectives and hopefully move us toward some general ideas regarding sustainable development.

The concern about sustainability appears to have arisen from an increased awareness about the relationship among human activity and biological-physical constraints. Our accumulation of wealth[2], people, and knowledge makes us more aware of past and current decisions regarding our socio-physical-bio space.

While it is, as it should be, impossible to segregate completely biological factors from socio-economic factors in defining sustainability, my charge is to address questions of economics and specifically community economic development. Figure 1 displays the essence of my conception of how sustainable community economic development occurs.[3] Sustainable community economic development is about changing perceptions and choices regarding community resources, markets, rules, and decision making capacity. While not obvious in Figure 1, I wish to argue sustainable development appears more achievable when we use accumulated knowledge (both scientific and experiential) to reframe questions that change the set of perceived options available. I am not suggesting that sustainable be redefined into meaninglessness, but that the choices we make regarding the four nodes of Figure 1 and their definition go a long way in making sustainable development attainable.

TABLE 1

Logic for Achieving Sustainable Development

OLD	NEW
Growth is preeminent	Development is preeminent
Benefits of growth will naturally trickle down and out to others	Equity considerations require conscious policy efforts
Individuals are wise and all knowing	Individuals can comprehend only part of what is happening and needed
Technological change is either always good or will solve most problems	Technological change is only one of many possible solutions, and may not even be one of the better choices
Tomorrow will look like today	Tomorrow may look like today, but certainly no guarantee
Externalities of space, time, and class typically of minor concern and likely to take care of themselves	Externalities of space, time, social must be explicitly considered
Dynamic economies are growing	Dynamic economies are creating new choices, reframing of issues, changing perceptions of markets and resources, changing values
Socio-economic-biological elements are largely independent or can be treated that way	Socio-economic-biological elements are so inter-dependent that failure to consider linkages creates problems

The balance of the paper addresses four questions important to sustainable community economic development. First, what is sustainable development? Second, how does sustainable modify community economic development? Third, what are the necessary conditions for sustainable community development to occur? Fourth, how can we support sustainable development at the community level?

WHAT IS SUSTAINABLE DEVELOPMENT?

Any definition of sustainable development needs to start with the World Commission (Brundtland) report Our Common Future which defines sustainable development as "that which ensures the needs of the present are met, without compromising the ability of future generations to meet their own needs" [World Cmsn, 1987, p.9]. The balance of the Brundtland report emphasizes management and control over development, plus a holistic approach to problem solving. Special note is made that since the linkage between the interlocked economic and ecological systems will not change, solutions must start with the policies and institutions of the social-economic-political environment. An overlooked aspect of the report, is recognition that "development is not a fixed state of harmony", but rather a process of change in which the use of resources, direction of investments, orientation of technological development, and institutional change are made consistent with future was well as present needs" [World Cmsn, 1987, p 9] One report [Sustainable Cmte, 1991, p 6] expands the Brundtland definition to include

> "… a system that secures effective participation in decision making, provides for solutions that arise from disharmonious development, and is flexible and has the capacity for self-correction … a production system that respects the obligation to preserve the ecological base for the future while continuing to search for new solutions."

The addition of disenfranchised groups in decision making is an important advancement [Allen & Sachs, 1992]. While their involvement in the actual decision making may not be a reality, the inclusion of their interests and perspectives in the choices considered is paramount.

The importance of time becomes crucial when considering the concern by many that they are having increased difficulty earning an acceptable standard of living and the increasing sense of being marginalized. This sense certainly places a premium on decisions favoring this generation and attempting to capture the 'good life.'" This idea is present in Ikerd's [1991, p 7] definition that sustainable rural community development as being "based on the realization of the inherent values of geographically fixed resources in ways that conserve nonrenewable resources, protect the physical and social environment, provide acceptable level of economic returns, and enhance the quality of life of those who work and live in rural communities."

Hooper [1992, p 13] offers

> "… sustainability as an understanding of the components needed for the adaption through time of human culture and society … generating a high level of human welfare and well-being within the bounds of the global resource endowments and global tolerance of the consequences of the human-resource interactions. I will define a sustainable society as one in which there is a conscious effort to adapt its social and cultural institutions to the needs for maintaining its resource base within the limits of the known adverse consequences of its human-resource interactions."

This idea of time and sustainable development does not imply maintaining or returning to some nostalgic recollection of how things once were [Allen & Sachs, 1992, p 30]. A form of nostalgic misdirection is the position that every community and its historic role should be protected from outside forces and has a right to survive.

In summary, sustainable development explicitly recognizes increasing limits (biological/physical) given past and current economic/cultural/social norms and knowledge. It is not absolute, but relative to shifting constraints, acknowledges different forms of capital, (i.e., renewable and nonrenewable), and appreciates the capacity to accommodate change. Sustainable development incorporates linkages between economic and ecologic, distribution across generations (time), space, socio-economic groups, and economic sectors.

HOW DOES SUSTAINABILITY MODIFY COMMUNITY ECONOMIC DEVELOPMENT?

Let's begin building the linkage between sustainable and community economic development by exploring some previous definitions.

One definition of sustainable community economic development offered by Dykeman [1990, p.6-7] is

> "… those communities that manage and control their destiny based on a realistic and well thought through vision. Such a community based management and control approach requires that a process be instituted within the community that effectively uses knowledge and knowledge systems to direct change and determine appropriate courses of action consistent with ecological principles. The process must be comprehensive and address social, economic, physical, and environmental concerns in an integrated fashion while maintaining central concern for present and future welfare of individuals and the community."

My definition of sustainable community economic development is the ability to survive and to persist in generating desired outcomes [Shaffer and Summers, 1988, p 1]. Sustainable community economic development is the capacity of local socio-economic systems to generate employment and income to maintain, if not improve, the community's relative economic position.

Economically sustainable communities possess the capacity to perceive and respond appropriately to changing socio-economic circumstances. Sustainable communities possess a political economy and other social constructs that permit the orderly and efficient maintenance and use of community resources and facilitates the adaption of the community to changes in the larger society.

An important element of the definitions is recognition of the changing circumstances in which the community functions. These changes can be depletion or revaluation of a resource (e.g., coal deposits, forest, scenic vistas), technological changes (e.g., drip irrigation, genetic engineering, fiber optics), demographic (e.g., aging population, single parent families, working couples), or economic structure (e.g., transnational corporations, relative decline of manufacturing employment). These changing economic circumstances alter the choice set for community response. Sustainable communities recognize these changes and mount responses that allow the community to maintain and improve its economic position now and through time.

There are four characteristics associated with what appear to be economically sustainable communities [Shaffer, 1991]. They are, in no order of importance: a) a slight level of dissatisfaction, b) a positive attitude toward experimentation, c) a high level of intra-community discussion, and d) a history of implementation. In a few words, communities that demonstrate the qualities of sustainability believe they, and they alone, make and/or control their own destiny. This recognizes that while individual communities are given different economic circumstances (resources, economic structure, access to markets, growth of local markets), the sustainable community will capture the economic possibilities available.

Before proceeding much farther it will help the discussion to review briefly how economic change can occur in a community. Table 2 lists the economic actions that can lead to economic development of the community. These actions, individually or collectively, can lead to a change in various economic dimensions of the community (e.g., jobs, income distribution, career prospects).

Returning to the model implied in Figure 1, it is now time to offer some specific definitions of the four nodes [Shaffer, 1989].

Markets generally refers to the external (export) and internal (nonexport) markets in the community. This node essentially contends that the community can produce competitively, it just needs to determine what to produce, how markets are changing, and where they are. The analytical questions are knowing what markets exist for community output (consumer/industrial); location of markets; who is the competition; and how is the market changing. The policy suggestions include increase inflow of outside dollars and /or reduce outflow of local income (see Table 2).

TABLE 2

Local Economic Development

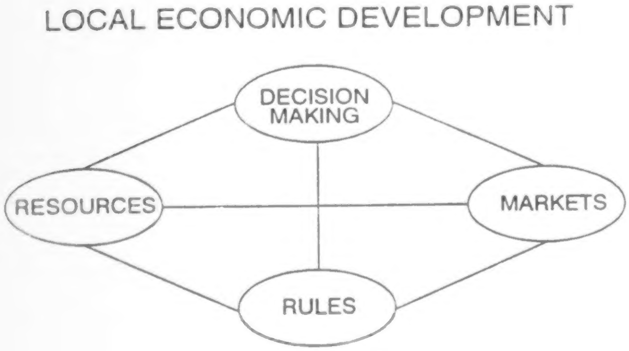
- Bring Money In
- Keep Money Re-circulating
- Use Resources More Effectively
- Find New Uses for Resources
- Find New Resources
- Change Rules of the Game

- Act Smarter
- Get Lucky

Resources generally refers to concerns with amount of, access to, and mobility of resources. This perspective essentially contends that we know what markets are, we just need to know how to produce for them. The analytical questions are concerned with identifying capital, labor, technology and whether they are available for alternative uses (mobility) or in sufficient amounts to increase community output. Policy suggestions include increasing the amount of capital, labor, technology; increase mobility/access to capital, labor, technology; and shift resources to more valued uses (see Table 2).

Rules of the economic game includes such realities as tax laws, eligibility rules for programs, environmental regulations, zoning, union contracts, and cultural norms. These typically are so imbedded in our thinking, they are acknowledged only when someone else is trying to change them in an unfavorable fashion. Policy suggestions appear straight forward — be cognizant of the effect of rules and alter those rules via the political process that obfuscate adjustment.

FIGURE 1



Decision making capacity is the ability to distinguish among problems and symptoms and inventiveness of the response. Analytical questions include framing issues in a fashion that enables possible solutions to appear [Bryson & Crosby, 1992]. It definitely includes getting to the problem rather than dealing with symptoms and history. In many respects, tradition is not necessarily accepted. Policy suggestions include education and communications about problems and options. It also includes creating a collaborative learning environment that promotes exploration of alternative solutions.

If the objective of community economic development explicitly incorporates sustainable, then in the context of our definition that sustainable means using new knowledge to create new choices and options through time, let us return to Figure 1. Now resources take on new meanings including: assimilative capacity; including marginalized groups; recognizing nonrenewable resources; lower energy use technology; and different skill sets for people, including access to acquiring new skills. Likewise markets start including recycling; consuming green products; and lifestyles. Decision making capacity now adds sensitivity about the bio-sphere; sensitivity about inter-generational implications; sensitivity about marginalized groups; and sensitivity about spatial flows. The rules of the economic game now includes discharge permits and markets; compensation to adversely affected people; development impact hearings; and taxes on transboundary environmental use.

The themes that emerge from the expanded definition of sustainable community economic development leads to policies that explore — increased community self-sufficiency; increased niche marketing (i.e., less volume more value); increased ecological awareness (e.g., diversification of production from mono-culture, recycle wastes or reduce waste stream); changes in labor and management requirements; increased demands on knowledge, creativity, and innovativeness.

WHAT ARE NECESSARY CONDITIONS FOR SUSTAINABLE DEVELOPMENT TO OCCUR?

I wish to start the discussion of necessary conditions with some of obstacles to sustained development [Schweke, 1993]. First, very few practical examples exist and for many of us concrete examples are a prerequisite before we alter our behavior. A partial list of examples includes waste recycling, toxic disposal or abatement regs, organic farming, using renewal energy sources and energy conservation. Unfortunately, many of the examples that do exist suffer from incomplete information on what, how and why they were done, plus the lack of results over time add to the difficultly of convincing others to test in their locale. Regarding my contention that the marginalization of some groups is an important dimension of sustainability, there are even fewer obvious examples.[1]

Economists contend a major theme in sustainable community economic development is the externalities of decisions and actions. Externalities can be both positive and negative, but are generally not accounted for in the market prices used to allocate resources across groups, space, and time.

In sustainable community economic development, time and future generations are explicitly brought into considerations of decisions and actions. If decisions and actions adversely affect future generations then current prices need to be increased to discourage that activity. To assert that time is important begs the question relative to what? To argue that some resources should be preserved for the future does not answer the economic questions of what alternatives are foregone — now or in the future? Who is being impacted by the choice of preserving a resource?

Martin [1994] reminds us how the issue of time complicates the decision making. First, it requires us to make explicit our choice about whether the future generation is more or less (and by how much) important than the current. While it is legitimate to argue that many current decisions overly discount future interests to replace that with an over discounting of current interests does not advance our understanding. Second, we are required to make judgement about the preferences of future generations with not much more than the assertion that it will be similar or different than the preferences of the current generation. Third is the question of how many future generations are we concerned with in our current decision to conserve a resource. While the idea of sustainable development implicitly assumes eternity, that simplifying presumption becomes incredibly complicated as we try to operationalize it with our current state of knowledge and decision rules.

Another externality is that the benefits and costs of a decision or action are distributed spatially to separate groups minimizing the possiblity that market prices will create self-correcting signals. So, rather than getting negative and corrective feedback the system becomes self-reinforcing.

The interaction between urban and rural economies is an example of spatial flows. Changes in urban markets (e.g., natural or artificial fibers, use of rain forest wood and rules (e.g., water quality standards, prevailing wage standards) often play out in rural economies in a perverse manner. Hite and Powell [1993] remind us of three qualities distinguishing rural from urban economies. These qualities are important to our discussion of sustainable rural community economic development. Distance and how it influences the level and form of human interaction is the first quality. The lack of scale/size/density effect on the ability to generate agglomeration economies is the second quality. The lack of diversity of economic functions limits the range of choices available and their perceived feasibility is the third quality. These qualities, individually and collectively, influence (typically appear to limit) how communities make choices in moving towards sustainability.

An aspect of sustainable community economic development that appears to have generated little direct discussion is that Schumpeterian development (creative destruction) and associated economic dynamics creates winners and losers. The sense of gains/losses may only be relative, but often is absolute (i.e., displaced worker, family, community). The assumption of beneficial spin offs from development efforts ignores they are an ineffective mechanism to reach many of these groups [Bartik, 1991; Shaffer, 1989; Summers et al., 1976]. The inability of some adversely affected groups to contribute to decisions leads to re-enforcing patterns of shifting burdens to those groups. Economists deal with this in statements about needed adjustments (migration, training, identifying new business opportunities) in a dynamic economy. It is insufficient to expect the market to handle many of the noneconomic aspects of these adjustments (asset fixity, family, gender, education, personal traits, age, race) [Hite & Powell, 1993].

Another fundamental change is how we include environmental and social considerations in judgements about development projects. One of the more interesting current discussions among community and professionals regarding community economic development is increased awareness of the multitude of job generation aspects seldom previously considered (e.g., living wages, career potential, skills requirement, fringe benefits, etc.).

Our economic accounting system is biased towards those transactions that involve some sort of monetary exchange and thus tends to discount nonmonetary aspects. For example, our current measurement systems of GNP and GDP indicate that a stay in the hospital is a larger contributor to well being than maintaining a healthy lifestyle. This complicates the choice people are asked to make — how do you wish to exchange one job and annual salary for "Z" units of future quality of life. While the choice is stacked against sustainability, we have made progress over last 20-30 years in the form of hedonic pricing and contingent valuation schemes [Bolton, 1989; Schultz, Luloff & King, 1991]. Martin [1994, p 109] offers some measures of sustainability incorporating dollars, social dimensions, and bio-physical aspects. Daly and Cobb [1989] even offer an Index of Sustainable Economic Welfare. The major limitation remains linking these indicators to community level decisions.

Some suggest that people consciously make short-run nonsustainable decisions and even imply that the economic system discourages longer term sustainable development choices [Meyers & Burayidi, 1991]. The reality is that we often do not know what the full range of options are or their implications and often feel we do not have the luxury of saying "we'll wait for a better option." A minimum precondition for sustainable development is active efforts to acquire and improve access to knowledge regarding the range of choices available and their implications. This will require a substantial personal and societal investment to create the culture to explore alternatives.

CAN WE SUPPORT SUSTAINABLE DEVELOPMENT?

Recognizing changing norms, knowledge, technology, markets lead to shifting needs for capital, labor, and space. I have contended that sustainable community economic development is less of a natural/physical/biological and more of an institutional phenomenon. Sustainable development is technically feasible, so the question becomes what policies, behaviors, and institutions are required to achieve it in practice. Have we framed the question appropriately? For example, energy is associated with economic growth, thus we must increase energy use to have economic growth, but remember growth is not development. Yet, if we adopt energy conserving technology we can conserve energy usage and still have growth. Or if we adopt new product configurations(lower hydrocarbon content) we could have both.

The proceeding example exemplifies the need to re-frame questions from either/or to multiple objectives. The paradigm shifts that must occur include reframing the growth/non growth dichotomy, market/state directed dichotomy, and that marginalized groups will not improve their relative position, thus absolute growth is the only choice. There is a need to explore new procedures (collaboration rather than competition becomes the guiding principle) with new partners [Shaffer, 1993]. Some of the new processes that sustainable communities will need to master include negotiation and conflict (both internal and external) management skills. A crucial component is accumulating and incorporating new knowledge into the choices considered and made.

Sustainable development in its most admirable form consciously reminds us of the complex system we are dealing with (e.g., time, ecology, marginalized groups, and externalities) and the stock of resources (e.g., physical, social, human capital) used to produce the outputs desired is both nonrenewable and renewable. It is not a no growth concept, but one in which different forms of growth are encouraged. It recognizes a dynamic economy is not a euphemism for growth, but refers to changing choices, reframing issues, changing perceptions of markets and resources, and changing values. Nostalgia is replaced with reality of changing needs and functions. Insistence on some historic view (e.g., production processes or community role) will only delay making needed choices. Economic choices are guided by both market and nonmarket (including intergenerational) determined values. There is concern about how change is creating increased disenfranchisement based on gender, skills, ethnicity, space, or economic status. Sustainable contains an effort to increase access to decision making and decision making with a fuller array of knowledge.

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[1] Professor of Agricultural Economics and Community Development Economist, University of Wisconsin-Madison/Extension. Paper prepared for International Conference on Issues Affecting Rural Communities, Townsville, QLD Australia, July 14, 1994.

[2] Wealth is defined as those things that society values. Thus, it is much more than physical items like gold, coal, sheep, land, buildings, or cash, but includes such things as family life, scenic vistas, satisficing work opportunities, etc.

[3] Many including George [1992] and Wilkinson [1991] argue that developing the social system called a community is far more important than just the economic dimensions of that community. I will limit my discussion to sustaining the economic dimensions of the community rather than the general concern of sustaining the community, but recognize they are inseparable ideas.

[4] Schumpeter [1983] defines development as "creative destruction."

[5] For some marginalized groups the 'good life' is rising above subsistence [Summers, 1993].

[6] An important policy dimension of sustainable development is multiple objectives including impacts on bio-sphere; inter-generational; nonrenewable resources; women, families, minorities; income distribution. The relative weights we put to these and other goals influence our choices.

[7] My lament about lacking of specific examples recognizes that this problem is being corrected by efforts like Flora, et al [1991].

SOCIAL AND COMMUNITY DEVELOPMENT: BASIC PRINCIPLES AND CURRENT TRENDS

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INTRODUCTION

The body of literature on social and community development ranges at one extreme, from the very abstract and academic that has few obvious practical anchors to the highly particularistic and usually descriptive case study that lacks theoretical underpinnings and generalizability, at the other end of the continuum. It is usually quite difficult to relate either of these two extremes to the actual situation in one's own country, region or community. Ideally, theory is universal while practice or action at the community level is always specific. The challenge for us is to connect the two in ways that are useful for advancing knowledge, educating new researchers and practitioners of various kinds, and making a positive impact on the lives of people in rural communities.

This paper will focus on some common principles of social and community development as these are currently practiced and discussed in the United States and in other parts of the world. The sense in which I am using the term social and community development is synonymous with, encompasses, or is closely related to such concepts as community organization, community intervention, community work, community planning, community action, social action, and social planning. There are two major dimensions of social and community development that should be linked conceptually and practically (the development of people, and the development of social institutions).

> "Social development has two interrelated dimensions; the first is the development of the capacity of people to work continuously for their own and society's needs. The second is the alteration or development of a society's institutions so that human needs are met at all levels, especially at the lowest, through a process of improving the relationship between people and socioeconomic institutions and recognizing that human and natural forces are constantly intervening between the expression of needs and the means to attain them." (Paiva 1977:332-33)

Daley and Wong (1994) define community development as action "at the community level that encompasses social, economic, and political capacity building within a value framework of inclusive, democratic participation, respect for diversity, and self-determination" (p. 10). This is consonant with definitions of integrated rural community development (see, for example, Coombs, 1980; Fitzsimmons and Freeman, 1981) that include the development of economic well-being, social functioning, political processes, and cultural institutions of a specific community.

> "...In the past, rural development has all too often been equated with economic development, and economic progress has been narrowly defined as an increase in local income per capita. Yet the benefits of economic growth may not be evenly distributed throughout a community. In fact, many social problems may persist" (Lapping, Daniels and Keller, 1989, p.282).

Bryden (1991), a strong advocate of integrated rural community development, notes that "a fragmented approach which seeks to promote any, one sector or service as the 'key' to rural economic development is bound to fail." For example, "although it is clear that both education and training will be necessary in the future transition of the rural, as well as urban, economy...education alone, in the absence of other things, may lead to increased outward migration from rural areas." He adds that "the same may be said for better roads and telecommunications" (p. 61).

While rural community development activity is often focused on persons and institutions within a specific geographic area (for example, a "block" of one hundred rural villages in India, an American Indian reservation in the U.S., a small development town in Israel), it can also involve work with people whose common purpose, condition or identification is not locality-based but derived from social, psychological, demographic, ecological, or functional factors, such as economic status, age, race, ethnicity, gender, etc. (for example, migrant farm workers in various regions of the U.S., socially isolated families in remote mining communities in Australia, elderly people left behind in depopulated rural areas of Spain, Scotland and other European countries). It frequently encompasses "basic social change efforts from leadership development programs to globally focused environmental, economic, and system change efforts" (Weil, 1994, p. xxvi).

There is increasing recognition among development researchers and practitioners that people should be the focus of development efforts - whether within a global, national, regional or local context or whether we are concerned with economic, social, political, or cultural development. For example, Griffin (1990), an economist, asserts that "economic development is coming increasingly to be understood as a process of expanding the capabilities of people" and that "people, in the 1990's, should be placed firmly in the center of development" (p.11). He adds that:

> "... The ultimate focus of economic development has of course always been human development, but at times this has become obscured by too narrow a concentration on expanding the supplies of commodities. *Economic growth* should be seen as merely one means among several to the end of enhancing people's capabilities. Commodities and capabilities are, of course, linked - but in the final analysis it is capabilities that matter and this is underlined by putting people first" (p.11).

Investments in human capacity building (for example, expenditures on health, nutrition and education) are good investments for a society, producing returns that are comparable to investments in physical capital. Investments in health, nutrition, education, and other human development areas complement or reinforce each other. Similarly, there are complimentarities between investments in human and physical capital.

> "... Investment in modern industry requires skilled labor; agricultural mechanization requires people who can, for example, operate and repair irrigation equipment; modern services (banking, tourism, public administration) require a literate and numerate labor force. Thus an emphasis on human capital formation can in principle yield high returns in the form of an increase in the productivity of investment in physical services" (Griffin, 1990, p.11).

TYPICAL COMMUNITY DEVELOPMENT FUNCTIONS

Among the range of possible community development functions, the following are fairly typical:

a. Developing public awareness and understanding of community issues, problems, and needs through organized educational efforts.

b. Helping community members to develop the expertise needed to address community problems and needs effectively.

c. Ensuring open access to all information relevant to community needs.

d. Assisting community groups to define their needs and determine their objectives.

e. Promoting action by governmental, voluntary and commercial organizations that are responsive to community needs.

f. Facilitating the development of self-help and mutual aid efforts within the community.

g. Encouraging collaborative efforts by community groups and organizations to address common concerns.

h. Promoting equal access to resources and services for all community groups with similar needs.

i. Ensuring that the needs of the most disadvantaged or vulnerable groups are adequately addressed. (Ellis, 1989, pp. 151-152).

Community development can be viewed as a form of problem-solving activity which involves engaging individuals, groups, and organizations in the community in specific coordinated actions that are addressed to identified community needs, problems or issues. These actions can be divided into two broad categories: 1) performing the interpersonal and political tasks that are involved in the identification, recruitment, mobilization and coordination of the people, groups, and organizations whose participation and support are needed if effective action is to be initiated and sustained at the community level, and 2) carrying out the essential technical functions, such as gathering data on the problem or issue in question, analyzing alternatives, developing plans and strategies, and generating the resources necessary for successful action (Gilbert and Specht, 1977).

ENSURING THAT DEVELOPMENT STRATEGIES ARE CONGRUENT WITH LOCAL CULTURE AND VALUES

There are characteristics of rural communities around the world (population dispersion, underdeveloped infrastructure, low service density, etc.) and trends occurring in many of them that present serious obstacles to achieving social and community development goals. In North America and Europe, rural communities continue *to experience a loss of schools, post offices, transportation, health* care, social services, and educational/training opportunities (OECD, 1991; Deavers, 1989). In France, for example, while 82 percent of urban communities and 40 percent of adjacent areas have pre-schools, family doctors and grocery stores, only 18 percent of outlying rural areas have them (Marcot, 1990). While comprehensive national and regional policy initiatives are necessary if these issues are to be addressed, a particular challenge is to address the needs that exist with strategies that are congruent with the local culture and values. In other words, social and community development activities should be undertaken that primarily, if not exclusively, capitalize on the strengths that are available in and the technologies that are appropriate for a particular community.

Just as Schumacher (1973; 1979) challenged the dominant paradigm of economic development that stresses increased industrialization and advocated the use of appropriate technologies that would, in his words, be based on "economics as if people mattered", it has also been suggested that we need to adopt appropriate social technologies in the sphere of social and community development (Helm, 1985; Chatterjee, 1990; Brawley and Schindler, 1988; 1991). Social technology has been defined by Chatterjee (1990) as "methods used to change or maintain the behavior of individuals, small groups, communities, or organizations in order to reach desired ends" (p. 27) and he adds that a major objective of social technology diffusion is "developing the capacity for individuals to cope with modernization and the constant change that accompanies it" (p. 24).

The essence of Schumacher's (1973) thesis is that "the logic of production is neither the logic of life nor that of society" (p. 295). From an international perspective, this means that not only does development not have to take the form of industrialization, modernization need not be equated with Westernization, and neither industrialization nor Westernization are necessary conditions for economic and social progress. In other words, it has become quite clear that "the most advanced tools of production are not necessarily best in all settings" (Helm 1985, p. 112). To give but one example close to home, during the early 1980's farmers in the American Midwestern States who had adopted the most advanced farming methods of the day were going broke in record numbers while the Amish farmers of Pennsylvania and Ohio continued to prosper using "horse and buggy" methods that were virtually unchanged since their arrival in the country 150 years ago. The Amish (or Pennsylvania Dutch) are, of course, a special case. Nevertheless, the relatively small traditional mixed farm of the Northeastern USA fared better than its larger single-crop Midwestern counterpart. Parallels can be found in other regions of the world and the lessons being learned are leading to calls for a commitment to "agro-diversity" and greater reliance on the adaptability of the local farmer (Brookfield, 1993). Similarly, in the health, education, and social welfare fields the most sophisticated equipment, practitioners, and procedures may not be applicable or appropriate if the most pressing needs of a particular community are to be addressed. There are abundant examples in the development literature of the disappointing results flowing from efforts to introduce social technologies that turned out to be inappropriate for a particular country, region or community (See, for example, Arnould, 1989; Barnett, 1990; Pandey and Yadama, 1992). The widespread dissemination of North American and urban models of social work education and practice to less developed countries in Africa, Asia and Latin America is but one example (Midgley, 1981).

If social and community development technology is to be appropriate, it must take into account the culture, customs, and values that bind and guide a particular community – its "dharmic order" to use a concept derived from the Sanskrit word *dharma* which means "that which holds together" (Muzumdar, 1966). In describing rural community development initiatives in Norway, Scotland, Wales and other European countries, Bryden (1991) stresses the importance of the local culture ("the 'glue' that holds it all together") in determining whether development efforts are appropriate and ultimately successful.

> "In Norway, through its Regional Development Programme (PTD), it is argued that culture, in its widest sense of the word, is important for creating activities and new dynamism in the regions. Cultural activities can create jobs, and not just because spiritual and intellectual values are an intrinsic good. The potential for cultural activity and involvement makes the locality more attractive and the sense of rootedness stronger. Cultural investment is important not least because of the concrete need for initiative and creativity in starting up activities and new employment. Cultural activities are therefore a condition of survival because they are the substantive elements which create identity, and make people fight to survive and secure continuity as a community" (p. 60).

Helm (1985) notes that "there is much interest nowadays in the meaning for development of these two entities: culture and values" (p. 11) and she gives examples of social technologies that have been devised in different parts of the world that are congruent with local culture and values and that are appropriate to a particular community's needs. She cites the example of Botswana's "brigades" (Kukler, 1979), unique educational programs combining vocational training with productive work in agriculture that constitute an indigenous educational system geared to the needs of a predominantly rural developing country. In this context, it is worth reminding ourselves that an estimated 80 percent of the population of developing countries live in rural areas (United Nations, 1979, p.3). Another example, from New Mexico in the United States, is the development in a small Hispanic community of some 200 people of a thriving sheep-rearing and weaving cooperative that uses locally produced wool to hand-weave high quality traditional rugs, shawls and coats that are eagerly sought by collectors and other buyers interested in Southwestern cultural artifacts. This community has been transformed in ten years from one that had few jobs, one of lowest per capita incomes in the country, and a declining population, and that was about to be bought up by a major land developer. It is now a vital and prosperous community, proud of its heritage, and no longer in decline or at risk of losing its land (Martinez-Brawley, 1990, pp. 195-197).

THE RE-EMERGENCE OF A COMMITMENT TO COMMUNITY DEVELOPMENT

Following a period of substantially reduced national commitment to addressing social problems, with low priority placed on the quality of life in low-income urban and rural communities, there is growing recognition at various levels of government and in the private sector that the U.S.A. cannot be a strong nation if it does not have healthy communities. The widening gaps that have been permitted to develop between income groups and geographic areas, the increased tensions that exist between racial and ethnic groups, the physical and social deterioration of urban neighborhoods, the economic stagnation and depopulation of rural areas have combined to threaten the social fabric of the nation and are provoking a re-thinking of national priorities. There is a renewed interest in looking for ways to generate constructive action that will begin to re-build and restore our communities. Incidentally, a recently issued U.N. report identified 17 countries that are at risk of social disintegration and internal strife because of widening disparities among geographic regions in terms of education, income, employment opportunities, availability of food, ethnic violence, and human rights violations (United Nations, 1994). While the U.S.A. is not among the 17 vulnerable nations listed in the U.N. Report (in fact, it is among the top ten nations in ensuring what the Report calls "human security" for its citizens), nevertheless, there is mounting concern about insupportable disparities in the quality of life of persons living in different communities and a renewed commitment to address these issues. In the first issue of the new *Journal of Community Practice*, the editor cited the reasons for the introduction of such a journal at this time:

> "Community practice has received little attention from the federal level during the past fifteen years. Nevertheless, the eddies and channels of social and economic development have continued to flow and many exciting projects ranging from grassroots leadership development projects to large scale human service system coordination and institutional reform efforts have flourished through nonprofit and foundation resources. There is again increasing interest in citizen participation in community planning and recognition of the need for public/private partnerships in community development that serve those most disadvantaged. Local efforts in social and economic development are burgeoning, as are considerable opportunities to strengthen communities, intergroup relations, and community practice interventions." (Weil, 1994, p. xxiv).

These developments have occurred concurrently with a wider intellectual debate about the proper ordering of society, what constitutes the common good, and what principles and actions will most likely ensure social justice for all citizens (Dahl, 1985; 1989; Boyte, 1984; Berry, 1990; Bellah et al., 1985; 1987;1991). Weil (1994) notes that it is not only timely that these themes for building and rebuilding community be asserted, it is necessary for our survival and positive development as a pluralistic and multicultural society in a global economy" (p. xxx).

DEVELOPING COMMUNITY NETWORKS

There has been tremendous growth in the numbers and types of community groups and organizations in the U.S.A. and, indeed, throughout the world in recent years - formal and informal, government-sponsored and independent, single-issue and broad-focused, locality-based and national or even international in scope. As has been true in the social sciences in general, there has been growing interest among community development researchers and practitioners in social network analysis and development. These social networks within communities are typically comprised of formal bodies (governmental, voluntary, and commercial entities), mediating organizations (self-help groups, mutual aid associations, etc) and informal systems (families, natural helping networks, etc) (Netting, Kettner and McMurtry, 1993, pp. 102-109). There are two main foci of interest: 1) the identification, promotion, and development of informal (or natural) helping networks within the community; and 2) the development of collaborative relationships among the various elements of the community's social system. Important considerations for the formal organizations are how to operate without undermining the informal systems in the community while, at the same time, not overestimating their capacity. Knowing what resources (formal, mediating and informal) exist in the community is not enough; it is important to be able to determine what has been called "systemic competence" - the degree to which the various elements function as an integrated system for addressing people's needs (Netting, Kettner and McMurtry, 1993, p. 110). A major challenge facing the community social service networks in the U.S.A., especially in rural areas, has been how to introduce some rationality into what have tended to be disjointed and uncoordinated patterns of service delivery. Because of the high degree of autonomy enjoyed by individual health and social service organizations in the typical U.S. community, combined with high levels of specialization and a tendency to compete with each other for available resources, the system is commonly imperfect and inefficient, with large areas of overlap along with wide gaps in service provision. The most common problems encountered are *fragmentation* (people experience gaps and duplication in service, usually due to lack of comprehensive planning and coordination of services); *discontinuity* (people encounter obstacles to their smooth movement through the system due to inadequate information and referral procedures); *inaccessibility* (people who need services do not receive them because of concrete or intangible barriers); and *unaccountability* (people have no means of redress when they receive inadequate service, usually due to lack of clarity about who is responsible or there is low sensitivity to client needs or wishes). (Gilbert, Specht and Terrell, 1993, p. 126). Over the years, there have been recurrent but not always successful efforts to promote and create more comprehensive and coordinated service networks in rural communities.

Somewhat more successful in the sense that it is more widely applied and more coherently represented in the research literature is the "community social work" movement that has been gathering momentum in Britain over the last decade or so (Hadley and McGrath, 1980; 1984; Barclay Report, 1982; Hadley and Young, 1990; Darvill and Smale, 1990; Smale and Bennett, 1989). While it has limitations, the most serious of which is probably its reliance or individual front-line social work practitioners to promote "systemic competence" – an expectation that may be unrealistic in many cases, especially when major community system development is required, American rural community researchers and practitioners have found the model worth looking at since it exemplifies principles of effective social work practice in rural areas that they have been advocating for many years (Ginsberg, 1976; Martinez-Brawley, 1982; 1987).

For example, community social work, as it has been evolving in the U.K., is based on the guiding principle that, in carrying out social service activities at the community level, the front-line social workers should operate collaboratively with clients, other community residents, the full range of local health, educational and social service organizations, elected officials, community leaders, and others to develop strategies that address particular issues, problems and needs that exist in the community. In other words, a social and community development approach needs to be adopted rather than simply a social service delivery approach. The total community, with all its elements and resources (individuals, families, groups and organizations - the total system of formal, mediating, and informal networks) constitutes the context within which service activity is planned and carried out. This calls for a new way of thinking on the part of the front-line community social worker. While direct service practitioners tend to focus on the situation of the individual or the family through a close-up lens that severely curtails background detail or throws it out of focus, planners, policy-makers and administrators take a wide-angle view of community needs, problems or service issues with little attention to individual detail. Smale and Tuson (in press) suggest that effective community social workers need the equivalent of a zoom lens that enables them to switch back and forth between the individual situation and the community with great facility so that both levels can be worked on simultaneously.

This approach recognizes that the formal social services do not represent the core of the care and service resources that are available in the community; rather, the largest volume, by far, of care and service is provided by family members, friends, neighbors, volunteers, and other informal carers through ongoing natural support systems. Acknowledging this fact is viewed as an important affirmation of the strengths of the community, in contrast to the usual posture of social service planners and practitioners which focuses on client and community weakness, failure or dysfunction. The emphasis is on using the formal social service system to bolster and back-up manifest and latent community networks and to fill obvious gaps. As Smale and Tuson (in press) put it, while "the bulk of care in the community is, and is likely to remain, the responsibility of ordinary citizens; ... a small percentage of people are entirely dependent on professional social services, and for others, a little help makes a huge difference" (p. 74).

Aside from requiring detailed knowledge of the characteristics of the local community and a commitment to working closely with appropriate formal, mediating and informal service networks, the British community social work approach must manifest the following characteristics if it is to operate effectively: 1) services must be decentralized to the local community; 2) services should be integrated; 3) staff roles should be broadly defined; 4) staff should enjoy a high degree of autonomy in the performance of their service roles; and 5) there needs to be a commitment to the prevention of individual, family, group and community problems, rather than simply responding to problems once they arise (Hadley, 1990; Martinez-Brawley and Brawley, 1992).

While similar community-oriented social work can be found in other parts of the world, including the U.S.A., these examples tend to be more isolated and individualistic representing specific strategies adopted to address a unique set of problems faced by a particular community. In the case of the U.S.A.:

> "Social development efforts range nationwide with many diverse populations. Appalachian economic cooperatives are flourishing as are the efforts of groups, such as Los Chicanos por la Causa in Phoenix, which are creating services that fit a wide spectrum of cultural, economic and social needs. ...Economic development projects are gaining strength and stability among many Native American groups with major examples in the Navajo nation and with the Inuit. (p. 26) The Hopi people, always blessed with a long-range environmental protection perspective, are engaged in social, agricultural, and economic planning efforts to improve living conditions, production, and job opportunities. Environmental organizing efforts are emerging from Highland Center in Tennessee and groups concerned about the impact of environmental racism are springing up in the east and west. In Maine, the Coastal Development Corporation, and in other rural areas, production cooperatives are thriving and farming cooperatives among African Americans in the deep South are gaining strength. In response to the economic crises confronting farm families, Prairie Fire continues to organize in the midwest to preserve the rural family-based farm economy and communities. All of these efforts reflect the basic reality that economic and social development are no longer separate enterprises, but need careful combination in community planning efforts" (Weil, 1994, pp. xviv-xvv).

CONCLUDING COMMENT

Social and community development work is always complicated and difficult because, even though the particular goal, need or problem being addressed may be relatively clear-cut and the persons, groups and organizations addressing it may be competent, cohesive and committed, the environment is invariably complex, involving a multiplicity of individuals, groups and organizations with different interests and that are frequently pursuing conflicting goals. Therefore, a great deal of the time and effort of the people engaged in social and community development work has to be devoted to the management of relationships with important elements of the environment. It is a complicated, challenging, and time-consuming process. While there may be personal and organizational pressures to find short-cuts, giving in to the impulse to oversimplify the process merely invites failure.

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RURAL SOCIAL PLANNING AND WELFARE SERVICES

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Our purpose is to raise issues for workshop discussion. In doing so we will attempt to map the conceptual terrain of rural social planning and welfare services within the broader frameworks of 'social care', 'rural change', 'social justice' and 'community'. While we cannot be entirely neutral, using broad frameworks which permit international diversity may help to minimise our biases.

National differences are central in a conference such as this. Nations differ greatly in relation to factors such as their place in the international context; availability of resources; economic and political structures; demographic composition; social and cultural processes; level of infrastructure development such as transport and communications; geography; climate; and preferred service models. The nature and extent of 'social planning' and 'welfare services' in any country will depend upon factors such as these.

By '*social care*' we mean the arrangements within a society which have the primary function of directly providing for the material, physical, social, emotional, intellectual and informational well-being and development of its members (see, also, Seebohm, 1968; Barclay, 1982; Bulmer, 1987; Cheers, 1992b, pp.568-583, 1993). 'Provisions' include items such as money, food, housing, health care, education, social support, information, and positive affirmation of one's personal worth and social value. 'Structures' include formal government and non-government service organisations such as hospitals, schools and welfare agencies which exist primarily to provide care or to develop social policies and social plans. They also include 'informal' organisations such as social clubs which have other primary aims but which provide care because they are involved in people's lives, and 'natural' supports such as friends, relatives and neighbours (Hanton, 1980). The extent and shape of social care in any nation is dependent upon an array of local, national and international factors.

Social care in rural areas has been under siege from a number of forces since the early 1970s. Rapid social, economic and political changes have left their mark and there has been a continuing succession of major global issues. For example, the changing balance of international trade relations has impacted heavily upon primary industries in small and vulnerable economies such as Australia. In 1992-93 the average Australian broadacre farmer involved in wheat/sheep/beef production had a net farm income of minus $(Aus)11,300 (Lawrence and Share, 1993, p.4). Lawrence (1991) further estimates that during most of the 1980s between 20% and 50% of farmers were receiving negative incomes. The shifting balance of world politics has become linked with major upheavals in places such as Somalia, Sarajevo, and Rwanda which have had devastating consequence for millions of human beings. In many nations, population growth has reached such critical levels that starvation is common place and previously productive lands have been devastated. Industry restructuring and technological change in many economically developed countries have resulted in high levels of unemployment and social dislocation. Continuing urban centralisation of power and capital has meant that many rural peoples have grown progressively poorer and more marginalised and disempowered. Overall, the more urban countries are wealthier than those which are more rural (Smith, 1984). Within nations, rural regions are disadvantaged relative to cities (Cheers, 1990). Increased mobility of capital has led to control over rural industries being held by fewer multinational 'agribusinesses' (Lawrence, 1987, 1991), the demise of 'family farms' (Lawrence and Share, 1993), high levels of rural unemployment (Cheers, 1990), reduced rural incomes (Cheers, 1990; Lawrence and Share, 1993) and far-reaching population shifts (Hudson and Jensen, 1991; Salt, 1992).

A run of international recessions, the political influence of urban based capital, and the stubborn refusal of mainstream economics to acknowledge the importance of other disciplines in solving human problems (Burgenmeier, 1992) have contributed to people being viewed as pawns in some economic game. People have been objectified and commodified as 'factors of production', 'units of labour power', 'markets', 'consumers' or as things which are 'impacted' upon (Cheers, 1994). Human needs have been defined in economic terms so that the only social issues rating a mention are those which interfere with market needs for a healthy, literate, numerate and productive workforce and for contented consumers (Cheers, 1994).

Forces such as these can be devastating for human lives, even in relatively wealthy places. For instance, a recent analysis in Australia concluded that population shifts in response to national and international forces have left some ugly sights.

> *"[O]f people, many of them aged, stranded in poverty in towns and on properties without much in the way of public infrastructure or social support; of farmers turning their backs on lifetimes of hard work and inter-generational hopes to sink into the faceless mass of urban poverty, of school leavers being forced to leave their homes to vanish into unemployed obscurity in the city, of hopeful low income families leaving their (urban) friends and supports to go to unfamiliar rural environments in search of cheap accommodation and a bearable, though still poor, lifestyle to live amongst strangers many of whom question whether they should be there, of older people retiring to locations which do not have the support services they need, of country towns, where existing services are stretched beyond sanity by sudden population explosions, and of these same towns losing the cohesion which for so long had kept social problems such as crime and domestic violence in check." (Cheers, 1994, pp 7-8)*

If social planning and welfare services are about identifying and meeting unmet human needs, if needs arise in and are defined by their context, and if the contexts of rural human lives are changing rapidly, then social planning and welfare services must respond to changing contexts. Consequently, *'rural change'* provides our second framework.

Many changes are occurring in rural areas. In Australia, the relative importance of primary industries has decreased steadily over recent decades (Sorensen and Epps, 1992). Settlement patterns are changing as many larger regional centres expand and some of the smaller towns in their hinterland are all but deserted (Salt, 1992). The demographic composition of some areas is changing with many young people leaving their rural homes in search of further education or employment (Bone, Cheers and Hil, 1993; Cheers and Yip, 1993). A recent comprehensive review concluded that crime rates increase at six to seven times the rate of population growth in rapidly expanding 'boom towns' (Freudenberg and Jones, 1991). Rural Australians are well acquainted with rapid environmental and climatic changes where severe prolonged droughts can quickly turn to raging floods, and where cyclones and bush fires can devastate whole regions overnight.

In some countries, technological advances quickly create new rural industries such as telecottages in Australia and the newer cottage industries in the United States. Satellite technology has recently linked even the remote Australian outback with mainstream urban society through television and modern telephone systems (Holmes, 1984). We only need to pause for an instant to realise how the advent of the automobile has diluted the exclusiveness, security and social solidarity of many rural communities. There have been changes in methods of agriculture which are threatening the culture of the family farm in places like Australia (Lawrence and Share, 1993). Domestic and international markets have become more volatile in response to such influences as the oil crisis in the early 1970s, the changing nature of international markets and the ebbs and flows of tariff protection and trade agreements.

Finally, international and domestic recessions have changed the extent and nature of infrastructure support available to rural areas. As economic times get tough governments are increasingly prepared to support only those regions which are viewed as currently or potentially contributing substantially to the national economy. As Graham Blight, President of Australia's National Farmers Federation, said recently.

> *"I'm concerned about the infrastructure that needs to be there - education, medical, communications, transport - all those things that are important to make a vital community and vital people. ..... There's a very big question coming up in how you maintain th vitality of rural communities when a lot of those services are starting to decline. If you want agriculture to develop and be a vital part of the Australian economy, this issue has to be addressed." (Blight, 1994, p.24).*

If it were ever true, the time is long gone when rural communities were immune to the social, economic and other changes affecting the urban world. Social planning which ignores such changes runs the risk of being at their mercy rather than correctives for them, or of being irrelevant to the everyday lives of people who are most in need.

It is fashionable in Australia, as it probably is elsewhere, to place social planning and welfare services within the context of regional development (Taskforce on Regional Development, 1993; Committee on Employment Opportunities, 1994). While this may be a useful action framework for governments it has limited utility as an analytic tool because it does not allow for stagnation or decline and because it is too often used in the narrow sense of 'economic development'. Conceptually, regional development is usually taken to mean regionally driven identification of economic and social needs, and integrated development and implementation of social and economic regional plans through a collective process involving the participation of a number of sectors. However, despite the rhetoric the concept is often operationalised in Australia and other western countries in terms of a more or less exclusively economic framework which not only pays lip service to social issues but ignores the fundamental interdependence of economic and social development (Taskforce on Regional Development, 1993; Committee on Employment Opportunities, 1994; Department of Housing and Regional Development, 1994). In the words of the Office of Rural Affairs in Victoria, Australia.

> *"[Economic well-being] should provide a springboard for overcoming social service difficulties and a well developed community encourages economic growth." (Office of Rural Affairs, 1991, p.61)*

More negatively, ignoring social development often delays and raises the cost of economic development. Conversely, economic stagnation or decline has often seriously affected social cohesion and provision for human needs. And the social impacts of economic development have been well documented. (Hudson, 1991, 1992; Hudson and Jensen, 1991; Cheers, 1994).

The other danger of an exclusively economic focus is that unemployment, perhaps the most obviously market generated social problem, can become the only social issue rating a mention in discussions about development (Task Force on Regional Development, 1993; Cheers, 1994; Garran and Megalogenis, 1994). To quote from the Australian context.

> *"In Australia, creating jobs for the unemployed is undoubtedly a major social issue of our times. However, reducing social development to job creation further commodifies people and ignores the needs of marginalised groups such as those with disabilities, the aged, disempowered and abused women and children, and indigenous and other people living in areas which lack significant growth potential." (Cheers, 1994, p.2)*

The third conceptual framework is 'social justice', which reminds us that the ultimate aim of social planning is improved well-being of people.

> *"(T)rue development is concerned with raising levels of life sustenance, human dignity and freedom. ... Development can be properly assessed only in terms of the total human needs, values and standards of the good life and the good society perceived by the very societies undergoing change. Thus, although development implies economic, political and cultural transformation, these are not ends in themselves but indispensable means for enriching the quality of human life." (Lea and Wolfe, 1993, p.6)*

Social justice has two components - ensuring the rights of citizenship and reducing relative material and social disadvantage as far as can be tolerated socially, culturally and economically in a given society at a particular time in its history. Rights of citizenship include physical well-being; shelter; emotional security and access to emotional support; social belongingness; receipt of an adequate social or market wage; access to affordable health, education and welfare provisions; access to information; political participation and representation; legal, social and territorial justice; and the right of appeal regardless of culture, ethnicity, religion, personal characteristics and regardless of where people live (Hall, 1993). To quote Riches (1994, p.9), "*social citizenship rejects the idea that a person's worth is only to be measured by economic productivity*". Relative disadvantage refers to an individual's or group's deprivation of goods, services and rights relative to other individuals and groups in that society.

Despite its conceptual difficulties (Green, 1991), social justice is an important concept because social planning and welfare services focus especially on people who are most marginalised, disadvantaged and disempowered; because rural areas generally are deprived relative to urban areas within nations (Cheers, 1990); and because, on the whole, more rural nations are deprived compared with less rural nations (Smith, 1984).

The key to rural social planning and welfare services lies in framing them within all those social and cultural processes which occur because people live in a shared locality which has a social history (Martinez-Brawley, 1990). Rural people have a sense of '*community*'; they share a common local history; they are committed to the well-being of their community as a whole; and they have an immediate concrete experience of the social, cultural and historical reality of their community. What this means is that social planning and welfare services developed outside of this context are experienced as 'foreign'. Because they are foreign, they are viewed cautiously and as not being entirely relevant to the lives of most people. They are often under-utilised or even actively sabotaged.

Observations such as these have led authors and residents alike to suggest that rural social planning and welfare services should be products of a community rather than external intrusions into it (Collier, 1984; Martinez-Brawley, 1990; Schindeler, 1993; Office of Northern Development, 1994). This is the antithesis of the traditional 'service provision' approach which so heavily dominates western societies such as Australia. This model is turned on its head. Now social planning and welfare services are locally driven rather than imposed by distant centralised administrations. They are more likely to be socially and culturally syntonic. Because people experience local conditions holistically, their planning and action tend to be more integrated in contrast to the highly standardised and compartmentalized approach of centralised planning. As one senior public administrator in Queensland commented recently, her Department's 'service provision' approach to social planning and human services has left it ill prepared to respond to the Australian Government's sudden switch to a regional development approach which seeks regionally driven and regionally owned responses to human need.

Effective rural *social planning* is a product of human interaction. It is based on accurate information, rational thought, and negotiation between parties with equal power. It has a number of components (Cheers, 1994):

- Assessing and anticipating current and projected needs of residents with respect to material, physical, social, emotional, intellectual and informational well-being and development;
- Assessing current and projected provision for rights of citizenship;
- Devising policies, plans, organisations, services, facilities and social processes to provide for these rights;
- Attracting resources to establish these; and
- Actually establishing them.

This involves:

- Participation and negotiation by relevant sectors with equal power including the state, government and non-government service organisations, and local groups, individuals and disempowered populations;
- Within a changing political, social, cultural, economic and environmental context.

Community development is the interactive component of social planning. It includes all the interactional processes through which people devise, implement and revise plans.

Our discussion of rural social planning will draw on our own experiences which will be socially, culturally and, perhaps, politically biased. But having given the apology, a review of the international literature reveals fundamental agreement on principles, with differences being more a matter of emphasis rather than about the principles themselves.

The literature suggests that rural social planning should be a collective responsibility shared by all sectors of society - the state, government and non-government human service organisations, industry, community groups and organisations, and private citizens (Cheers, 1984; Watkins and Watkins, 1984). It is not the sole responsibility of governments to decide what is good for everyone. Nor should it be left entirely to each citizen to fend for themselves and provide for their neighbours. However, it would be naive to believe that all sectors will have access to all information which is necessary for sound decision making or will always agree. Consequently, the concept of collective responsibility may best be operationalised in terms of inter-sector *negotiation* (Coombs, 1993).

If plans are to be effective local people must 'own' them. For, otherwise, they will not be implemented and may even be actively sabotaged, and services and resources will remain under-utilised (Cheers, 1985). This is so important in rural areas where locality based identification and social solidarity are usually much stronger than in urban areas (Martinez-Brawley with Buck, 1990).

Rural social planning should be rational, systematic and empirically based. It should be based on demographic information, profiles of services and policies; and information about current and projected social needs obtained from surveys with a number of different sectors. Other information should be sought relating to regional history, settlement patterns, transportation systems, existing communication technology, economic base and projected economic developments, politics, social structure, geography and climate. Policies, plans and services should be rationally developed from this foundation.

Social planning should also be syntonic with the realities of the region, including local demography, social structures, cultures, physical environment, geography and climate, as well as residents' lifestyles, resources, knowledge and skills. For example, in a recent study (Cheers, 1992b) I found that it is of no use in remote towns in Far North Queensland to train one or two 'key' local people to provide counselling to a cross-section of their neighbours when residents will talk about intimate problems only with their closest friends and relatives. Planning should also respond to economic realities. For instance, where opening a mine is about to increase the local population, planning should provide for increased staffing of schools, hospitals and other services. Social planning should also take account of existing service structures. For example, there is no point in providing a specialist therapeutic service when essential resources such as housing are inadequate.

For a number of reasons rural social planning should integrate with economic planning (Cheers, 1994; Johnson, 1994). Both contribute to the total well-being of people. Economic development can have potentially negative social impacts which can be anticipated with services and resources. It can also have positive impacts by providing resources for social development. Moreover, good social planning will support economic development by engaging community support while poor social planning can seriously retard economic development and increase costs. And as I recently pointed out (Cheers, 1994, pp.8-9), commonly espoused principles of effective economic and social planning are virtually identical.

Rural social planning has to be cost efficient and innovative (Cheers, 1992a). Given the high per capita costs involved in providing rural compared with urban services, especially in more remote areas, services have to be highly cost efficient to be funded. Innovation is important because standard urban service models where, for instance, clients go to a central office, are often inappropriate to rural needs. New service models are required which respond to local realities and which are cost efficient compared with urban models.

In two senses rural social planning should have a consolidated revenue base. First, integrated service structures require consolidated funds for otherwise each service will be protective of its revenue base and develop in isolation from or in competition with others. Second, if social and economic development plans operate from a single fund then regions are more likely to be clear about priorities and to consider the relationships between social and economic development.

Finally, because rural populations the world over are disadvantaged relative to urban (Smith, 1984) it is incumbent upon all who seek to serve them to raise their consciousness about their disadvantaged position, empower them to assert their rights, and advocate for them when appropriate (Martinez-Brawley, 1982, 1986, 1989, Cheers, 1991; 1992a). This responsibility falls to all who are involved in planning and providing services.

Welfare services contribute to the material, social and emotional well-being of people and are made available by organisations established to do so. They are only one component of total social care processes as these were defined earlier. Martinez-Brawley (1982, 1986) has encapsulated the essence of rural welfare principles in her 'tenets' of 'indigenisation', 'conscientisation' and 'politicisation'. By 'indigenisation' she means that welfare services should be provided within the framework of local needs, values, cultures and lifestyles, controlled locally, and be unique to local circumstances rather than standardised. Where the service fits into the community is crucial. Generalist rather than specialist services are called for which do not recognise boundaries between fields of service such as child welfare and disability services or between methods such as casework and community development. The process of 'conscientisation' develops:

> *"a conscious awareness of oppression among ruralites, but also a pride and acceptance of the rural inheritance and the rural condition ..... leading to the revitalisation of a culture ..... (it is) a positive, identity-enhancing force as well as a critical and action oriented drive" (Martinez-Brawley, 1982, p.72).*

'Conscientisation' involves forming coalitions within and between communities and regions to seek a better deal. Decades of neglect by national and state governments as well as urbo-centric social and economic policies, prolonged recessions, poor commodity prices, ever-increasing production costs, and years of drought have resulted in many Australian rural communities such as Tumby Bay in South Australia (Tumby Bay District Community Support and Action Group, 1993) and Julia Creek in North-west Queensland spontaneously 'conscientising'.

Finally, through the tenet of 'politicisation' Martinez-Brawley argues that rural welfare services and, for that matter, social planning are part of wider political processes. There can be no middle ground - either the rural professional is on the side of the disempowered and marginalised or they have been coopted by the forces that keep disadvantaged groups powerless. Their function demands that they choose the former (Cheers, 1991).

The consensus appears to be that more integrated and coordinated rural welfare services are more effective than categorical services and are more likely to avoid service duplications and gaps (Martinez-Brawley and Delevan, 1991). Integration can take many forms ranging from loose informal arrangements between organisations to genuinely generic workers or generic teams (Martinez-Brawley and Delevan, 1991). To achieve this we need some degree of funding integration. In Australia, which is typified by highly specialised human services, we have been experimenting with variants of cross-programme funding (Office of Northern Development, 1994, pp.95-98). Essentially, this involves creating a single fund by relocating money from a number of specialised funding programmes and pooling them for rural services.

Access is another key issue for rural welfare (Cheers, 1992a), and service designs must be devised which increase access for potential clients. Models such as mobile generic teams, visiting specialists and tele- and video-conferencing have all been tried with varying degrees of success.

Staff selection is crucial to ensure low turnover and local credibility. Staff must be carefully selected, thoroughly trained, and comprehensively supported so that they stay and provide a quality continuing service. (Zapf, 1989; Lonne, 1990)

Finally, there should be substantial local control over services because residents understand local conditions and acceptable service designs, and because this increases their motivation to contribute (see, for example, Martinez-Brawley, 1982; Watkins and Watkins, 1984; Cheers, 1992a; Office of Northern Development, 1994). Local ownership or, at the very least, local participation can take a number of forms. Genuine local ownership occurs where services are provided by locally based organisations controlled by local people. Written service agreements between large non-local organisations responsible for services and smaller local community based organisations actually providing them are another way for local people to maintain substantial control. These are stronger where they are produced by negotiation between equal partners. Weaker ways of involving local people include representation on management committees, local reference groups or, weaker still (but all too common in Australia), seeking the advice and 'consultation' of local groups and individuals.

A number of rural welfare service models have been identified (Smith, 1989; Cheers, 1992b, pp.42-46). The fundamental distinction is between community based models where services link with spontaneous caring efforts of people and provision based models where the service is provided directly.

Of course, people spontaneously help each other in lots of ways without formal service organisations ever knowing about it or getting involved. Community based models of service provision involve agencies deliberately relating with these natural support processes in some way. This can happen, for example, where an organisation brings people in need into contact with helpful neighbours or where people in key positions, such as a postmistress, are trained to provide informal counselling in the course of their daily work (Froland, Pancoast, Chapman and Kimboko, 1981; Cheers, 1987). Other community based models involve service organisations providing resources to facilitate spontaneous helping interaction between people (Cheers, 1992b, pp.576-577, 1993). This occurs, for example, where an organisation helps residents to travel to supports, where lengthy telephone calls are subsidised by government, where an agency initiates and resources mutual aid groups.

Provision based models, on the other hand, can be classified as either 'point-specific' or 'network' services (Holmes, 1981). Whereas users go to point-specific services, network services go to users.

Point-specific services provide either a single specialised service or a range of services. Users can access these through physical attendance or through some other means such as a telephone, two-way radio, television, video tapes or audio tapes. Access can be facilitated by public subsidisation through low cost transportation, tax deductions or direct payments. Multi-service centres provide an array of services in a more or less integrated fashion. These are suited to towns with populations between 8,000 and 20,000 (Johnson, 1980, pp 49-50) and also have the potential to fill a vital role in planning, developing and coordinating services on a regional basis (Smith, 1984).

Network services can operate according to satellite or mobile models, either of which can provide a specialised or multifunction service. In the specialised satellite service the regional office of an organisation establishes and supports a remote office. It is also possible to provide a multiservice facility through a satellite model, although this is rarely mentioned in the literature apart from references to multi-skilled agents (Cheers, 1992c). Mobile network services can also be specialised or multifunction. The former involves one or more specialists regularly 'doing the rounds' of settlements in a given region or visiting them when required. Poole and Daley (1985, p.338) noted that the success of specialised mobile network services depends on how closely *"their services are attached to a local agency or someone who can officially represent the team during its long periods of absence from the community"*. This, they suggested, *"helps reduce the problem of long-term absence as well as of follow-up and service continuity"*.

The mobile multiservice centre usually operates on a circuit basis. With the addition of a staffed home base and two-way radio, the service can respond to specific requests for assistance as they arise. Moseley and Packman (undated, pp 207-9) noted that mobile services have the advantage of being able to service small pockets of demand. They are also inherently flexible with respect to location, time, type of services delivered and the clientele they serve. However, they are costly and slow to respond to immediate need. They also accrue large amounts of 'deadtime' while, for instance, personnel are driving long distances.

As we said at the outset, our aim has been to raise issues for workshop discussion. To facilitate cross-national analysis and comparison we have viewed social planning and welfare services from the broad frameworks of 'social care', 'rural change', 'social justice' and 'community'. We have suggested that they are only part of the total social care processes within society, and that they should pursue social justice ideals, respond to on-going rural change and be products of, rather than intrusions into rural communities.

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RURAL RESTRUCTURING: SOCIOLOGICAL MEANING, SOCIAL IMPACTS AND POLICY IMPLICATIONS

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ABSTRACT

Major economic as well as socio-political changes are taking place in the rural regions of the advanced societies. Global forces have begun to undermine traditional means available to rural-based producers profitably to grow and market agricultural commodities, international finance is influencing investment decisions in primary, secondary and tertiary industries in rural regions, 'green consumerism' is helping to dictate the move to a less chemically-dependent agriculture and the environmental lobby is becoming increasingly involved in determining land and water use in rural regions. Older, productionist strategies for farming which encouraged the application of new agrotechnologies as the key to enhanced output and profit are, in many areas of the world, being challenged by new approaches based on the flexible production and niche marketing of value added, rather than bulk, commodities.

Through the growth of tourism, leisure and recreation, rural regions are becoming places of consumption as much as places of production. This, in conjunction with the impact of new technologies in the areas of transport, communications and the food industry, is changing the meaning of 'rural' and helping to alter the forms and extent of government intervention in rural regions.

The 'rural restructuring thesis' – as presented in this paper – is an attempt to grasp and explain the changes which are occurring in the rural regions of the advanced societies. After an assessment of the previous attempts to theorise agrarian – and wider rural – change, the paper examines the work of more recent writers who seek to explain restructuring in terms of the Fordist/post Fordist dichotomy and via regulation theory. In raising questions about the form and extent of rural restructuring, the paper also provides an assessment of the likely impacts of changes which are occurring in regional Australia.

RURAL SOCIAL CHANGE: THE EARLY DEBATES

It is tempting to review the work of theorists such as Spencer, Durkheim, Tonnies and Weber as those who contributed most to an understanding of the processes of change from an older rural, to an emerging industrial, society. Yet, it was really only the latter two who provided a macro-sociological explanation for changes which were occurring in rural society – and neither was able convincingly to link the changes in *rural* society to the changes occurring in agriculture.

It is therefore useful to turn to the work of Marx and other theorists who conceived of social transition in terms of structural changes to the economic base of nations entering the realm of capitalism. For Marx, class struggle was the key to understanding social movement and, based on an historical materialist approach in which he periodised so-called modes of production, he posited the existence of two major classes for each mode. The two predominant classes in the capitalist mode were the bourgeoisie and proletariat. Marx identified several other groups whose relationship with capitalism was tenuous. One group was the peasantry and the other the petty bourgeoisie – both vestiges, he believed, of an earlier time. The peasantry was a lumpen class which was neither progressive nor capable of mobilising political support to ensure its continued survival. It was for Marx (1968) a class fraction which was 'non existent historically speaking' – a remnant of a feudal past and incapable of full incorporation into the dominant capitalist mode.

While able to articulate with capitalism through the sale of commodities in the marketplace and through the purchase of manufactured goods for use in the production process, the petty bourgeoisie was similarly vulnerable. It had limited capital and limited labour and would find it increasingly difficult to compete with firms within the capitalist mode. The extraction of surplus value within the latter mode ensured that profit levels would, despite the expected fluctuations within an essentially unplanned system, always be higher than in among the petty bourgeoisie. In terms of agriculture, there was a place for a commercially-based agriculture in which farmers (or owners of landed property) could extract surplus via ground rent. But, as with the peasantry, the conditions of the capitalist marketplace would ensure that agriculture, like manufacturing, would move from a cottage industry style of production to factory-like production.

These was not, as some have suggested, the pronouncements of a technological determinist. Marx in fact argued in the third volume of Capital that in situations where so called circulation capital was predominant there was the possibility that the capitalist mode would incorporate alternative forms such as independent commodity production. Thus, in Australia and other settler economies, the emergence and persistence of family farming is fully consistent with Marx's view of the ability of capitalism to articulate with small scale enterprise. So, it is not true that Marx had not envisaged a role for the petty bourgeoisie in the world wide spread of capitalism. Its economic future was contingent upon the capacity of that class to engage in struggle and to develop, through political compromise, the means of achieving sufficient state support to ensure the perpetuation of small scale capital in agriculture. This aside, Marx warned that it was likely that support would wane leaving the rural petty bourgeoisie vulnerable to incorporation by capital.

In his important work Die Agrarfrage (the Agrarian Question) the turn-of-the-century German Marxist Karl Kautsky argued that the fate of the peasantry was proletarianisation. Like Marx before him he argued that the forces of capitalist development were creating two polar classes and that, over time, the peasantry would become incorporated into the working class of Germany - something which Friedland (1991) believes has been more or less proven to have occurred.

In Russia – at about the same time Kautsky was writing – Lenin was exploring the relationship which that country's huge peasantry had with the small, largely town-based proletariat. Lenin flirted with the idea that the peasants, suffering as they were from depressed economic conditions, might have sufficient revolutionary zeal to enable the forging of an alliance with the workers to overthrow the oppressive politico-economic structures under which both groups toiled. He was later to abandon the idea that the peasants were interested in fundamental change. Their fate was sealed by their inability to understand the character of capitalist development and to recognise the importance of the working class as the leading force in social change. And, in terms of rural social organisation, the penetration of capital would result in the richer peasants becoming more capitalist-like (employing larger volumes of capital, hiring workers and selling commodities in the marketplace) and in the poorer peasants becoming progressively marginalised and impoverished.

Chayanov suggested a different fate for the peasantry. Imbued with a tenacious desire to hold onto property no matter what the social and economic consequences, the peasants' family-based decision-making and insular behaviour would enable them to survive in the face of adversity. The peasants could, through bouts of self exploitation and because they remained on the outside of capitalism, co-exist with an emerging system of commodity production and exchange (see Schulman and Newman, 1991).

These differing approaches, based on different assumptions and (in terms of Kautsky and Lenin, different historical social formations) provided a basis for predicting the fate of the rural petty bourgeoisie and for suggesting the contours of a rural society under the influence of increasingly large scale capital. For Marx, Lenin and Kautsky there would be the further penetration of capital in agriculture, the marginalisation of the petty bourgeoisie, the incorporation of many members of the petty bourgeoisie into the working class and, eventually, with the growth of the forces of production, the industrialisation of agriculture based on the use of large scale capital in conjunction with a paid workforce. While there would be remnants of opposition to such changes in rural regions, it was likely that rural regions would come to mirror the cities in terms of capitalist class relations, the extension of the activities of the state and to social life: the economic base of capitalism would be predominant and, despite the unevenness of development, the life of the people in one region of a nation state would come to resemble that of the remainder. Chayanov, in contrast, predicted that peasant life would continue and peasant culture be maintained as capital was forced to wait, as it were, just beyond the peasants' village.

RURAL SOCIAL CHANGE:
MORE RECENT CONTRIBUTIONS

Fairweather (1992) following Buttel et al. (1990) has provided a summary of what he believes are the three positions which represent a distillation of the work of the earlier theorists. There is first, the subsumption school which suggests that family farm agriculture is coming under intense pressure to conform to the rules of capitalism. In doing so farmers -while appearing to be, in class terms, independent commodity producers - are only able to survive by linking with capital on the latter's terms. They must, if they are to retain their farms and lifestyle borrow money from banks, constantly upgrade equipment and purchase other products of agribusiness. They must sell increasingly to large transnationally based food and fibre processors and produce their farm goods in a way which conforms to the needs of those firms. They are, in other words, only capable of surviving by being incorporated into the wider system of capitalist production. The extent of their subsumption is masked by their continued ownership of the means of production and by the family-based nature of their production system. The work of Friedland et al. (1981) de Janvry (1980) Lawrence (1987) Bonanno (1987) and Le Heron et al. (1991) tends to support this view. These authors argue that farmers are being proletarianised and that rural society is being transformed by capital in ways which will guarantee surplus extraction from agriculture by ever larger units of capital.

The second school, one which emphasises survival, takes its inspiration from Chayanov. Authors such as Mann and Dickinson (1978) have argued that their are biological barriers to the penetration of capital in agriculture. Mann's later work (see Mann, 1990) incorporated Weberian insights about the importance of the values of farm life as the motivating factor in keeping production within the family and in some circumstances sacrificing overall economic prosperity for family cohesion. Others, such as Friedmann (1978) have stressed that independent commodity producers in agriculture are inherently more competitive than large scale capital and that this factor is crucial in understanding the persistence of family farm agriculture in the face of capitalist development. According to the logic of this position, family farm based agriculture is, propped up by its associated populist and agrarian fundamentalist ideologies, likely to remain within capitalism no matter how transnationalised the economy, no matter how large the economic units outside agriculture become. Changes will occur but not to the extent that the family farm system of agriculture is undermined or abandoned.

These two positions can be summarised in the following way (adapted from Fairweather, 1992: 55).

Figure 1

Key Elements of the Subsumption and Survival Positions

	Subsumption	Survival
Key Position	Family farms dominated by economic structure	Family farmers respond and sadapt to economic structures
Mechanisms	External control of debt, inputs, technology etc	Adaptation via managerial flexibility and household relations
Role of State	Assist external capital/ facilitate capitalist expansion	No identifiable tendency: can help or hinder farm survival
Impact of Increased Exposure to Market Forces	Difficult for family farms to survive	Easier for familyf arms to survive
Outcomes	More corporate and 'larger than family' farms	Mostly family farms
	More off farm work	More off farm work
	More part time farmers	Part time farming may develop
	Fewer, larger farmers	Little change in farm numbers
	More hired labour, contracts	More household labour
	Corporations move beyond the biological and organisational barriers to food/ fibre prodection	Family farms enter new areas of production which strengthens their position

A 'synthetic' school, the third position within the political economy of agriculture, is one which claims that farmers are capable of providing resistance to incorporation by capital. It emphasises that at the local level there may be many responses to macro-sociological changes and that the continued development of family-farm based agriculture may be linked directly to the opportunities which farmers themselves discover as new possibilities emerge in production and marketing. In other words, resilience is manifested in a variety of options which maximise the conditions for capital accumulation within the structure of family farm production relations. Writers identified with this third position include Buttel et al. (1990), Marsden et al. (1990) Mooney (1988) and Whatmore et al. (1987). Marsden et al (1993), in particular, have been at pains to argue that any change in agriculture must be placed within the context of the wider trajectories of capitalist development.

Despite the potential for compromise within the third position above, there has not been any real resolution to the issue of the place of the family farm within the structure of contemporary capitalism. Different sociologists, with different conceptual and theoretical positions may look at the same phenomena and conclude that subsumption is occurring - or that farms are surviving. By the early 1990s the debates about social change in rural areas entered a new phase: it was one based upon the need/desire to move beyond what were thought to be increasingly unproductive arguments about the interpretation of what constituted farm family survival and to interpret in a more holistic manner the place of rural society in a globalised world economy. The new phase was one in which agriculture and rural societies of the advanced nations were located firmly within a transnationalised structure. It was to be from this position that discussion could ensue about the future of farming and of rural society.

RURAL RESTRUCTURING: A STARTING POINT FOR ANALYSIS

In Britain, Terry Marsden and his co-workers have sought, through the use of a synthetic conceptual framework, to understand many of the contemporary problems of, and changes to, agriculture and rural society. Their stated aim (see Marsden et al., 1990:12) is to

> reverse the respective telescopes of agrarian political economy and economic restructuring. In other words, to locate the contemporary predicament of rural areas at the intersection of the two major forces transforming them, the reorganisation of the international food system and the social and economic restructuring of rural regions under the pressure of capitalist recombination.

In terms of agriculture, the authors suggest the following provides the key to understanding change:

1. Overproduction of foods and fibres had occurred during a period of relatively stable demand in the world economy since the Second World War. While technology had increased the capacity of producers to supply goods, such increases did not correspond with growth in demand. Yet individually producers were conscious that their future depended upon utilising the latest products of agribusiness and, where possible, increasing the size of holdings. With agribusiness supply firms providing the input 'solution' to those farmers who borrowed to purchase the latest equipment, chemicals and so on, firms in the corporate sector became increasingly wealthy and able to dictate the terms of the new agriculture. Farmers became more indebted.
2. Polarisation within agriculture was reinforced, with a small number of large producers, often linked to agribusiness firms in the processing sector via contracts, being responsible for the bulk of produce traded and a large number of small producers contributing very little to total output. In association, another trend emerged - particularly in the US: the 'disappearing middle'. Those in the middle were often caught between the need to constantly revolutionise the forces of production and the inability to pay for the new inputs because of falling or stagnant commodity prices.
3. Partly as a response to their progressive marginalisation and subsumption, those producers who wished to stay in business actively sought new ways to achieve increased income. For some this meant taking off farm work: for others it was possible to become pluriactive – adding value to existing raw materials or developing new sidelines such as farm tourism or at-the-door sales of products. This meant that it was possible, through a combination of activities, for members of the petty bourgeoisie to continue farming - even if their adaptations meant that the family farm was becoming a different structural entity.
4. The 'problems' of agriculture - low commodity prices, sluggish markets, increased competition from overseas producers, the requirement that new and expensive inputs be used to increase productivity – spilled over into the social organisation of farming and the effects were felt as well in rural communities. In the smaller rural settlements which were dependent upon agriculture there was a general contraction of economic activity. This was exacerbated by the general movement from Keynesian programs of support to neo conservative policies which justified rationalisation of infrastructural expenditure and service withdrawal. Buttel (1993: 16) (after Roobeek, 1987) summarised these changes in the following way.

Figure 2: Differences Between Fordism (Social-Democratic Society) and Post Fordism (Neo-Conservative Society)

Characteristics	Fordism	Post Fordism
Core Technologies	Electronics, chemicals, plastics, petroleum, car industry	microelectronics, biotechnology, new materials
Production Concept	International mass production	Computer integrated management, hollow factories, hyperindustrialisation
Consumption Pattern	Mass consumption	Highly-differentiated consumer styles
Market	World market	Triad markets (North America, EEC, Pacific Rim)
Employment	Full employment; homogeneous mass workers	Job-losing growth; structural unemployment, individual decentralised workers
Labour Relations	Mass trade unions; collective bargaining	Company and individual agreements; basic income
Government Policies	Keynesian socio-economic policies, welfare state, social democracy	Deregulation; state intervention in technology policy, self-servicing society; neo-conservatism

5. It was recognised that the economic 'benefits' of cheap food and fibre had not been properly costed against environmental damage. That is, 'externalities' such as the pollution of waterways and loss of soil were being progressively politicised in an era of the 'greening of agricultural policy' and the demands of consumers of food and of those (such as new residents and leisure-based groups) who competed with farmers for the use of the rural environment. The two issues at stake were, first, the disputed meaning of 'rural' in societies where a number of competing groups were attempting to define, in their own ways, natural resources and their management; and second, the interpretation of the causes of environmental pollution and destruction. As McMichael (forthcoming) has suggested:

> For agro-food systems, the pace and scope of changes occurring at this time is phenomenal. Not only are food cultures and technologies undergoing extensive restructuring, but also national farm sectors and indeed nation states are being redefined as the world integrates economically and socially. The content of contemporary agrarian politics is inexorably shifting from the (nationalist) 'agrarian question' to the (internationalist) 'food' and 'green' questions, as late-

twentieth century politics and cultures confront accelerating reconfiguration of agriculture and natural resources

THE THEORETICAL UNDERPINNINGS OF RURAL RESTRUCTURING

Marsden et al. (1993) have identified three approaches which have been employed to understand recent changes in rural society. The first, and arguably the most important, is that of the regulationists of whom the best known are Aglietta (1979) and Lipietz (1987, 1992). The general argument is that a regime of accumulation (a particular economic arrangement with corresponding social norms and values) provides for economic and social reproduction. Each regime of accumulation is associated with a mode of regulation - a politico-institutional means of fostering accumulation. The mode of regulation comprises fiscal and monetary policy, taxation laws, a framework for wage negotiations, and policies directing capital flow - both domestic and foreign. In any particular period, a mode of accumulation will correspond with a mode of regulation to ensure continued economic activity and social reproduction. This is not unproblematic: the extent of class and other political activity determines the contours of any regime of accumulation/mode of regulation including, importantly, its longevity.

There have been two identifiable regimes of accumulation within advanced capitalism. The first was the so-called extensive regime which lasted to the end of the First World War and was associated with the opening of new frontiers for capitalism. The second has existed since the end of the Second World War (see Kenney et al., 1991) and has been 'intensive' in form - requiring the further application of technology rather than labour to increase the rate at which surplus value has been generated.

Some authors (Kenney et al., 1991) have argued that the intensive regime can be labelled as Fordism - a system in which mass production from factories was 'matched' by mass consumption from consumers whose wages and social conditions were regulated via Keynesian economic policies. Under the Fordist regime, capital accumulation was guarded by the nation state. Profits were 'shared' by the various classes in a manner which gave stability to the system of production and yet stimulated further the use of intensive technologies.

Fordism was considered to have entered a crisis period beginning in the early 1970s. Kenney et al. (1991: 182) have outlined the problem as experienced by the US:

> A combination of the overheated and lagging US-Viet Nam war economy and the 1974 OPEC oil crisis radically undermined US fordism...within the larger economy, real per capita income decreased, rates of productivity declined and overproduction became endemic. Additionally, during the 1970s, unemployment and inflation rose, and measures of economic activity oscillated significantly and unpredictably. The post-war economic growth model entered into crisis.

It is further suggested that production within the US might be entering, as indicated earlier by Buttel, a period of 'post fordism' associated with new ways of organising (and new ways of controlling) surplus generation.

In terms of agriculture it is suggested that while fordism guaranteed the farmer a politically stable environment in which to operate - and helped to ensure that the profits from farming were invested in the industrial products which would be employed to generate further profits, the crisis of agriculture after the early to mid 1970s represented a turning point in the mass production/mass consumption relationship. Consumers were beginning to demand more healthy 'green' (largely chemical free) products, the nation state could no longer guarantee profitability in a world of increasing competition in the production of foods and fibres, and the Keynesian policies which had placed a welfare net under rural people was being removed (see Buttel, 1993; Kenney et al., 1991). The economic conditions of farm production and wider consumption, together with the reductions in state support for rural regions, became a catalyst for the restructuring of rural society.

A second perspective – one which introduces the concept of 'flexible specialisation' - has emerged alongside that of the regulationists. The basic insight is that older forms of production are outmoded and that the capitalist world is entering a new (if not disorganised) era in which consumer requirements for new and varied products, together with the inherent sluggishness of large scale producers properly to address issues of style and taste, and the ability of new electronic and other technologies to allow small scale production to be profitable, have combined to make mass markets and mass production obsolete (see Piore and Sabel, 1984; Lash and Urry, 1987). The emphasis now is on decentralised production units which allow small(er) scale capital to profit from more responsive production arrangements and from niche marketing. In agriculture, the move to 'flexible specialisation' might be represented by the collapse of any 'factory farming' as well as the demise of monolithic grower bodies like the Wheat Board and their replacement with specialised farmers who grow organic cereal for a niche market developed by a breakfast manufacturer - or better still, who sell their value-added product directly to the Japanese or Korean market.

The third account, according to Marsden et al. (1993) is that which emphasises the spatial aspects of change within the global economy. It too, sees the demise of Fordist forms of production but emphasises, in particular, how economic change has spatial consequences for the social division of labour. In Britain, for example, Massey has suggested that capitalist development in association with neo conservative policies has created spacially uneven patterns of industrial growth - a pattern which significantly disadvantages the more economically marginal areas and populations. In the US Buttel (1993) has suggested that the withdrawal of state support is likely to result in further polarisation between regions. This point was raised in relation to Australia by Lawrence (1987) and more recently by Lawrence and Share (1993), Rolley and Humphreys (1993), Stilwell (1992, 1993) and Cheers (forthcoming).

In other words, while the parameters and dynamics of change within the modern capitalist world remain somewhat indeterminate it is certain that there is restructuring occurring and that the impact of such restructuring is no longer exclusively about whether the family farm will survive or not (as if the rest of rural society would somehow expand or contract on the basis of change within agriculture) but about the place of the rural region within the context of a changing capitalism. Rather than focus therefore on the problems of farming and the role of the farm lobby in securing benefits from the state as a means of retaining their position within the economy, it is necessary to ask broader questions: such questions include those about rural policy in an era of 'green' consumerism, the application of new technologies in non metropolitan areas, the place of the rural in regional development, and finally, the way in which rural regions are inserted into the global economy. These four areas are highlighted below:

RURAL RESTRUCTURING: POSSIBLE SOCIAL IMPACTS AND EMERGING QUESTIONS FOR AUSTRALIA

While it is not possible to provide here a thorough account of all the processes associated with change in rural Australia, the following is a summary of the likely impacts of the changes predicted by the rural restructuring literature:

1. Rural Policy in an Era of Green Consumerism

'Green' consumers are those who eschew mass produced foods (those which may have chemical additives, be packed in environmentally unfriendly wrappers, and be made in ecologically unsound ways) and who demand, instead, 'clean' foods - those construed, by virtue of the way they have been grown and delivered, to be wholesome, nutritious and produced in a manner which protects the environment.

The Europeans and Japanese, particularly in the last decade, have been increasingly concerned about food safety and food quality. At the same time that the cheaper, mass produced, foods have become accepted among consumers whose incomes prevent wider choice, a large group of presumably middle class consumers in those countries has demanded 'quality' foods. The same is occurring today as consumers in the newly industrialising countries, with ever higher real levels of income are demanding better foods. The question then is 'How will Australia respond to the changes occurring in relation to the international marketplace, and what might this mean for rural Australia?'

It is presently thought that through the implementation of ecologically sustainable development options Australia will improve its environment and produce the sorts of foods which consumers are increasingly demanding. The development of Landcare, Federally-funded initiatives to grow more trees, integrated catchment management and whole farm planning are seen to provide the basis for a more sustainable agriculture in Australia (see Lawrence, et al. 1992). It is often assumed that a more sustainable agriculture would, in being family-farm based and presumably less productivist in character, lead to a more sustainable structure for rural communities. But, at the moment, there is no evidence that that will be the case. The very notion of what might be sustainable and how sustainability might be achieved is also being questioned (see Lawrence, 1993; Beder, 1994). And, for example, given that family farm agriculture has caused the problems of environmental degradation in the past, why should we anticipate that it might be the vehicle for environmental renewal? Just as importantly, while there might be evidence from the US that farmers may be adopting post fordist options linking farmers to niche markets for environmentally-friendly foods, this may not be the case in Australia. In fact, there is evidence to suggest that Australian farmers are obeying 'fordist' signals which demand the continued production of bulk commodities for undifferentiated markets (see Lawrence and Vanclay, forthcoming).

While we should not be so sanguine about a post fordist agriculture emerging and providing community benefits to rural regions, three other developments may be viewed positively. The first is the emergence in rural regions of new options for farmers (pluriactivity) which may help them to survive in spite of any deterioration over time in the terms of trade for agriculture; the second is the movement to some rural regions of retirees, tourists and those spending money in recreational and leisure pursuits; the third is the ways in which the meaning of 'rural' is changing to reflect the first two developments. Rural is not a fixed entity but a social construct which undergoes alteration as specific sets of social actors compete to give meaning to social space (see Mormont, 1990). If through pluriactivity, farmers have new options to increase their livelihood, they may be better able to stay in the district and contribute to economic growth. Similarly, if rural space is inhabited by those who are no longer prepared to tolerate the chemicals from sprays or the noise of farm machinery or the lack of foresight of local government, they may mobilise to ensure that their definition of rural and their interpretations of the best use of resources is that which prevails. There is a need for studies which seek to identify the changing meaning of rural and which show the complexity of economic and social developments which are occurring in regional Australia.

2. The Application of New Technologies

The adoption of new productivity-boosting technologies by farmers has meant, in the context of flat markets for agricultural goods, that farm numbers can contract: some farmers will become less efficient and less productive than their counterparts and read the market signals that they must leave agriculture. Of course, some do leave while others use whatever is available to them to provide them with a living in farming (see Lawrence, 1987, Gray et al. 1993). According to Cribb (1994:13) from the mid 1960s to today the number of farms has fallen from 200 000 to 120 000 and the rural workforce has declined by over 100 000. Since every farm job generates between two and three service/manufacturing sector jobs, the loss has had quite a profound 'negative multiplier' effect. Furthermore, Cribb (1994: 12) suggests, in reviewing a Coopers and Lybrand report, that the losses in agriculture are paralleled in the communities upon which farming is dependent:

> Of Australia's 849 shires and municipalities, 240 lost population in 1990 -91, and in the vast majority of cases the loss followed a consistent trend since the mid-seventies.
>
> Of the communities that shrank, 210, or 88 per cent of those in decline, were in rural areas... The shrinking shires lie predominantly in the Midlands, the northern and eastern wheatbelt of Western Australia, the far north, central west and Darling Downs of Queensland, the Mallee, Wimmera, Western Districts and Loddon-Campaspe districts of Victoria, the Murrumbidgee, north and west of NSW, the Yorke and Eyre peninsulas and mid-north of South Australia, and the north and west of Tasmania.

Increased efficiency in farming, brought about by new technologies, has enabled ever larger volumes of food and fibre to be produced with a reduced agricultural workforce. If efficiency increases are going to continue - and there is no reason to suspect that they will not - then it might be reasonable to assume that population decline will continue. That people will use cars and other easily accessible forms of transport to shop and buy services in regional centres is suggested as another factor in the demise of the small town (see Henshall Hansen Associates, 1988).

While it is more or less certain, if the present trajectory in agriculture is taken as given, that there will be fewer farmers and, quite possibly fewer people in traditional farming regions, does this mean fewer people in rural Australia? It has been argued by some that with new satellite and telecommunication technologies it is entirely possible for businesses to expand in regional areas. With communication costs being reduced over time and the cost of an inner-city location costly for business, some components of city-based business as well as some businesses themselves might expand to regions which provide a least cost option. (For example the case for the decentralisation of legal practices in Australia has been well argued by Williamson, 1990). Were Australia to become more like the US which has non uniform wage rates for various job classifications, the regional wage rates might be expected to fall - providing yet another incentive for businesses to locate in non metropolitan areas. It could be that the instantaneous communication brought about by various 'electronic byways' (see Parker, et al. 1992) might, in conjunction with cheaper air fares, better service provision and an improved quality of life in regional centres, act as a catalyst for population growth in those centres.

3. The Place of the Rural in Regional Development

Since the perceived excesses of the Whitlam Labor Government's Department of Urban and Regional Development, decentralisation policy has been somewhat out of favour with Canberra policy makers. Where it continued to be in favour at the State level - as in Bjelke-Petersen's Queensland of the 1970s and 80s - it had a strong 'development' bias ensuring State monies would fund the building of dams, roads and bridges to help stimulate private (often overseas) investment in tourism, mining and agriculture. Just as with the Federal Government's expenditures during the Fraser and Hawke years there was no coherent policy, no overall raison d'etre for monies to be provided for one form of expenditure over another. The regions would continue to be injected with dollars for social security, policing, education, health and so on but these were to be based on per capita calculations which, in an era of increasing fiscal restraint, led to the 'rationalisation' and centralisation of services.

While there remain very important distributional (social justice) and environmental (containment of urban pollution) reasons for initiating decentralisation, Stilwell (1993: 255) wonders whether there will ever be any possibility of government directed economic growth in the present period of neo-conservative economics. He argues that as the 'externalities' of city living (congestion, pollution, environmental destruction and lifestyle limitations) become more unbearable there should be a move to decentralisation as a possible 'solution'. But, he notes:

> decentralisation policy is simultaneously less likely to be implemented in these circumstances because of the fundamental conflict between such an 'interventionist' approach to regional policy and the 'economic rationalist' doctrines. This is the paradox – that the case for decentralisation becomes stronger as the result of a policy orientation which undermines the possibility of official

> support for a vigorous decentralisation programme.

In this sense it is no wonder that criticism has been drawn by the publication of the report of the Task Force on Regional Development (1993) (see Guille, 1994). The Task Force was established to examine economic and industry development issues from a regional perspective, to examine factors affecting the investment of private sector capital in regional areas, and to see if 'adjustments' might need to be made in government service delivery to help facilitate regional development. It was asserted that Prime Minister Keating had identified regional development as a high priority for Australia at a time when it was entering new relations with a more trade-liberal Asia-Pacific region.

The two volume report showed, as expected, that there are major disparities between regions and recommended the establishment of Regional Economic Development Organisations which would, through a network of local businesses, produce integrated regional development plans and help to 'promote', for the eyes of business, regional Australia. The regions are to be 'empowered' so that local people can find local solutions to local problems, and not to be reliant on government funding support for economic development.

The approach here is one in which the government is seeking – one would hope genuinely – to ensure that changes occurring in, and economic opportunities being identified for, Australia, will be spread geographically and not be concentrated in the cities or other more privileged economic zones. The problem here is encapsulated by Guille (1994: 25):

> The Taskforce Report is based on three principles: all regions should have equal access – as far as possible – to basic infrastructure; the regions should have the opportunity to develop their local economies; and those regions suffering some specific disadvantage, for example, remoteness, should have equal access to special assistance. (However) these principles are in direct conflict with the principles of market liberalisation (which stresses) marginal return and user pays principle (and) 'trickle down' development....

Like Stilwell, Guille has identified the difficulties surrounding the endorsement of state policies which may help to 'direct' business investment into regional Australia - in the face of economic forces which appear to lead to the centralisation of economic activity in the major cities. And, as if to put regional development initiatives in what we know to be the traditional mould, Epps and Sorensen (1993) suggest that smaller rural settlements will most probably have to rely upon the 'wits and the wiles' of politicians for their existence.

The above seems to be an (albeit brief) summary of what we already know about regional development in Australia. So, what might the restructuring literature lead us to consider in this context? There are three issues of direct importance: flexible specialisation (the possibility that the regions hold the key to extended reproduction for capitalist enterprises which wish to 'escape' the more unionised and potentially less conducive profit making, conditions of the cities), the political pressure which may be placed on governments simultaneously by urban dwellers for a less crowded and less polluted environment and by rural dwellers for new economic activity as a catalyst for unemployment relief and social development, and third the growth of an environmental consciousness which places the consumer of food closer to the source of that food and leads to the abandonment of intensive food production systems.

It is not possible to discuss these ideas at length here: it is possible to indicate that decentralisation will, of necessity, be a crucial element in the social development of rural communities in Australia during the remainder of this decade (see Lawrence and Share, 1993; Cheers, forthcoming). The extent to which decentralisation and regional planning may be efficacious in relieving significant parts of rural Australia of their decline will be based on the political struggles waged over the meaning and purpose of the 'rural' in contemporary Australian society and the extent to which neo-conservative economic policies, and the impacts of those policies, can be reversed.

4. Rural Regions within the Global Economy

It is not yet known what form the rural region will take within a global system of capitalism. Is it to be a location which competes internationally with other regions of the same country – and other countries – for corporate-based investment dollars? And, what degree of autonomy will particular regions within the nation state be allowed in their economic dealings with transnational capital? We know, already, that agribusiness is 'playing off' regions within Australia with regions in Thailand and New Zealand in regard to the sourcing of inputs for processed foods. Will regions become increasingly vulnerable to the policy (profit making) decisions of transnational capital in an era of reduced economic/financial commitment by the nation state?

It has been suggested that GATT might become the international body which regulates the global economy. Were this to be so - and were it to continue to insist on the extension, world wide, of a more liberal trade regime – are rural Australians likely to be advantaged? Some would suggest 'yes', after all, if our agriculture is as efficient as economists suggest we would be immediately advantaged by the sale of more agricultural goods in the international marketplace (see National Farmers' Federation, 1994). On the other hand, the world in which GATT's rulings were to override those of the nation state would be one in which rural regions would be relatively unprotected and their future uncertain. One cannot abandon notions of agency here. Perhaps the rural region would become a more politically important unit than it presently is in Australia under a complex system of federal/state/local decision making. Perhaps regional self-help and self-determination would be made more meaningful if the decisions made by citizens in its boundaries had direct global outcomes. Political movements based on regional problems, issues and potential developments might arise if power were genuinely devolved and people felt they had a basis for effecting change at the local/regional level.

CONCLUSION

It is clear to many contemporary analysts that as global forces become more important in determining the political, economic and cultural shape of Australia in the 1990s it is necessary to develop new ways of examining change. It is argued in this paper that while some of the most important arguments to date have been concerned with the place of the family farm within the structure of capitalism, the place of the farmer is of diminishing importance in determining the fate of rural regions.

Just as new trends and developments – such as the growth of tourism and the service sector in general, the rise of environmentalism, the move to 'flexible specialisation' in manufacturing, and the advent of 'global sourcing' – have become features of international capitalism, so too, we are required to develop and apply new concepts to understand the significance of those changes. It is suggested here that the Marsden et al. (1993) and Le Heron (1993) suggestion of the application of a more spatially-informed regulation theory is the best way to understand the changes occurring in rural Australia.

Regulation theory alerts us to, among other things, the significance of the emergence of 'green' policies, the potential demise of the influence and power of the nation state, the importance of global capital, the differences occurring spatially as capital penetrates particular areas, new forms of struggle and resistance, and the implications of applying new technologies. Certain questions are raised (and others, quite obviously, left out) in a regulationist approach to restructuring. It is suggested that in looking to the future impacts of restructuring in rural areas of Australia, it is necessary to recognise that some levels of government may become increasingly irrelevant to economic development within the regions. The task is to establish which development paths are possible within a global economy and to inform political action aimed at improving social development, equity and justice at the regional level.

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SUSTAINING RURAL COMMUNITIES

Frank W. Rennie — Scotland

ABSTRACT

The immediate problem with the nature of this presentation is in delimiting the scope of the subject matter and coming to a consensus on workable definitions of the three concepts contained in the words of the title. From both a purely academic perspective, and from the action orientation of the practitioner in the field, the definitions of "what is rural?", the concepts of "sustained", "sustainable" and "sustainability", and the consideration of the nature of "community development" (the balance between the individual, groups, and the whole community) are of critical importance to the agenda of development activities, appropriate or otherwise.

This paper looks briefly at contemporary rural society, and by proposing a working definition of sustainability which encompasses the economic, socio-cultural, and environmental aspects of rural life, seeks to define a general agenda for development by investigation of what prevents sustainability. Four key elements are identified: the lack of access to the means of production; alienation from indigenous cultural identity; depletion of non-renewable commodities, and the under-utilisation of local assets and resources.

Having briefly set the main theoretical points for discussion, the examples are elaborated upon by reference to the crofting communities of north-west Scotland. Crofting is a singular form of land tenure which, though rooted in small-scale agriculture, supports and encourages a wide range of economic activities, a distinctive and vibrant cultural heritage, and the positive maintenance of high quality natural environment.

The point is made, however, that "sustainability" is a difficult philosophical concept as well as having immense problems in the translation of ideas to practical action. This results in many communities exhibiting a complex schizophrenia of 'sustainable' and 'unsustainable' life-styles side-by-side. On this basis, and extending the case studies based on the crofting communities to the wider view, a number of realistic, achievable steps are proposed to place the importance of rural people, and the encouragement of 'sustainable development' as a priority for the immediate future.

INTRODUCTION

For many people, the myth of the rural idyll is a self-perpetuating concept, peopled by stereotypes of jolly farmers and relaxed, worry-free communities. Those of us who live and work in these same rural communities know only too well that, while rural life may (for some of us) be ideal, it is not without many serious problems and difficulties. An ongoing problem is the nature and extent of the changes in rural society, economy, and natural environment, some of which we are looking at more closely in this conference. What is undoubtedly true, and I do not propose to enter into any deep philosophical abstractions into the current nature of "rurality", is that rural areas are different from urban areas in many fundamental aspects.

A large part of the myth of the rural idyll is the notion of going "back to nature" and through this act to an inherently stable, even self-sustainable society, where everything has its place, and, for example, household demands for consumption can be met by production of crops in the fields surrounding the house. This may be a baseline position for many communities, but for most rural inhabitants this is not an option. The reality of contemporary rural society has its share of depopulation, unemployment, multiple deprivation, and environmental degradation. But far from being an entirely negative life style, this depressing side is counterbalanced by many desirable and highly valued facets of rural living, including, a strong positive local identity, pleasant landscapes, social and cultural strengths, and the nebulous but almost tangible factor of "quality of life". Unfortunately while the negative aspects can almost all be measured empirically and charted statistically, the positive attributes are very much more difficult to measure, and in fact may not even be noticed at all by external observers of a close rural society.

This has been well described by one of my favourite Australians, the journalist John Pilger,

"Unless prejudice is countered, it is reinforced. Unless misconceptions are corrected, they become received truth. This 'neutrality' is commonly known, with unintended irony, as 'objectivity'." (Pilger 1992).

I make no such claims of 'neutrality' or 'objectivity' here, for my perspective is very firmly that of rural dweller who chooses to work in the rural environment, both as a practitioner and as a student of rural activities.

WHAT DO WE MEAN BY "SUSTAINABLE"?

The search for "sustainability" in development initiatives has become a new yardstick by which to measure development activities, much in the same manner as "efficiency" has been used in the past, (Hodge & Dunn 1992, Magnusson 1992). Indeed "efficiency" is still trundled out as a factor in some definitions of sustainability, yet while there are ample definitions of "sustainability" and "efficiency" for specific situations, there is no universal consensus on the practical application of these terms to complex systems such as human society, (Carley and Christie 1992). An honourable exception to this theorising is the intelligent introduction to good practice on the large scale (nation state) which can be found in the comprehensive treatment set out in the Sustainable Netherlands Action Plan (Buitenkamp, Venner, & Wams 1993).

I have no wish to deliberate any further upon interpretations of the terms which I have used so far, as I hope these will be discussed in the following workshop, and in any case I would prefer to illustrate these general comments with some specific examples from my own experience. There is one point, however, which we should clear up before proceeding further with this presentation. There is a clear difference between the terms "sustained", "sustainable", and "sustaining" - and more importantly, they cannot be used with impunity to imply the same context.

According to my dictionary, to sustain a development activity is to carry the weight of it, usually for a long period of time, in order to keep it from falling back or sinking. The implication of 'sustainable' initiatives, however, is that they have an internal dynamic which, if not actually self-sustaining, have hopes to approach this status at some point in the future. Scottish Natural Heritage (SNH), the quasi-government agency entrusted with environmental protection in Scotland, has stated;

"Economic activity can be seen as any way in which we seek to maintain human welfare - whether individual or collective. If it is held that human welfare encompasses the needs of future generations; that it has a global perspective; that it is not just a question of immediate material wealth, but also a function of the state of environment;........ and that human activities can have effects on the environment which have human consequences, then economic activity which maintains the stock of natural resources the capacity of natural processes, the capital material wealth (derived from natural capital) and the opportunities for spiritual fulfilment could be described as 'sustainable'.

The paper goes on to describe the belief that development can be seen as the way in which we seek to improve human welfare through economic activity, and, though decisions are not generally made with regard to this holistic approach to human welfare, concludes that we need to look afresh at alternative ways of decision-making in our society, ways which "would need to openly balance the costs of one element of welfare with the benefits to another." (SNH 1992).

The notion of 'sustaining' communities, in contrast, recognises that the scientific principle of the conservation of energy (that energy can be transformed but it is never created or destroyed) may apply with equal validity to the complex interface between human society and the natural world. Also implicit in the concept of 'sustaining' communities is the recognition of an action agenda for development activities, which of course raises further questions, in particular "Whose agenda is it?" and "Who benefits from such an agenda?"

Early development theories and agendas were dominated entirely by motivation of the economic argument, and while there are many who continue in this belief (particularly the 'monetarists' of the New Right) the agenda has fortunately long ago widened out to include a recognition of the value of social development activities, including health, education, housing, and cultural activities.

O'Riordan (1983) included socio-economically sustainable utilisation as one of the meanings of sustainable utilisation, which he interpreted in terms of thriving rural communities "whose inhabitants have local loyalties and a sense of affinity to the land and features surrounding them." (Hodge and Dunn 1992).

There is a fascinating dialogue which could occupy just this single stage of the widening out of the development agenda, but of course the expansion of our concepts of "What constitutes development?" does not just end here. Recent decades have experienced a dramatic rise in the public awareness and popularity of environmental protection and conservation, (e.g. Smout 1991) and though the fine lines may need to be drawn around the interaction with other activities (e.g. between conservation and economic exploitation of certain resources), there is a widespread acceptance of the importance of the environmental agenda in development issues. So successful have environmental lobbyists been, that in many cases the entire notion of sustainable development has been dominated by the limited, though important, discussion of the environmental aspects sustainability as if these were the only considerations.

The reality is that the theory and practice of development, particularly, I would argue, in rural areas, is tightly bound within the spheres of three inter-relating and complementary facets of development. These are -

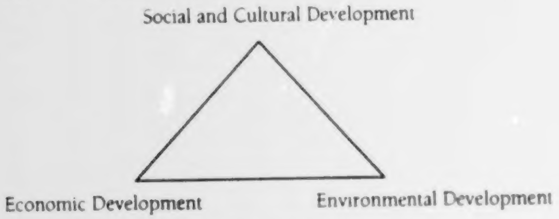
Economic Development

Social and Cultural Development

Environmental Development

These three can be represented at the apices of a ternary diagram

Fig. 1 **Three facets of 'rural development'.**



The important point about this schematic representation is that wherever you may place the priorities of a development project, there will always be a modicum of interest from the other two end-types. Even a project which is intended to be 100% geared towards economic development, will have a vestigial impact upon socio-cultural and environmental development opportunities. In reality there are likely to be substantially greater overlaps between these three general fields of development activity, be they positive (complementary and/or reinforcing) or negative (conflicting and/or competing)

WHAT IMPAIRS SUSTAINABILITY?

Rather than dissipate the momentum of the dialogue by dwelling exhaustively on definitions and theoretical descriptions, it would perhaps be more useful to investigate the activities and conditions which impair the realisation of our concept of sustainability, and through this to seek ways to more closely approach the "ideal" of a sustainable development enterprise.

It would seem to me, that although there are many factors which relate to specific situations, (e.g. Bryden, in press) there are at least four generalised obstacles. These are:-

4.1 Lack of access to the means of production

4.2 Alienation from indigenous culture and identity

4.3 Depletion of non-renewable commodities

4.4 Non-utilisation of (renewable) local assets

I would like to leave these obstacles without elaboration for now, (though I will return to them later) and to look at how these actually relate to the strength and vitality (or otherwise) of my own rural communities of north west Scotland

THE CASE OF CROFTING

Without wishing to go into too much detail, for there are numerous good historical (Hunter, 1976; MacPhail 1989, Cameron 1986), and contemporary accounts (Hunter 1990 & 1991; Rennie, 1988 & 1991a & 1993a, Crofters Commission 1991 &1992) of the crofting system, ; this is a social and cultural system which operates under a unique form of land tenure, covering much of the coastal areas and most of the larger inhabited islands of the Highlands and Islands of Scotland

The 1886 Crofting Act established —

5.1 Security of tenure in the occupancy of the croft, including the rights to assign the croft tenancy to any member of his/her family (during thecrofters lifetime or after death)

5.2 Compensation for fixed improvements carried out by the crofter and his/her predecessors. In practice this is only important if the crofter chooses to give up crofting and sell the tenancy back to the landlord as owner of the croft

5.3 The right to an independent fixation of a fair rent by the Scottish Land Court. If the rent demanded by the landlord is felt to be excessive, the crofter can ask the Land Court to intervene.

There were very specific reasons for the creation of crofting in the manner which it has persisted, (e.g. Caird 1987, Leneman 1987) and while these may be of limited interest to rural development practitioners outwith Scotland, the modern manifestations of the crofting system have profound implications for the transfer of information and know-how to other rural areas world wide (Bryden, 1987)

A first presumption for sustaining rural communities must be the retention of an optimum level of rural population. This is not without its own problems, and in determining 'optimum levels' and Hodge and Dunn (1992) make the very important point that, "the relevant concern ought to be with the quality of life which is offered, not simply with the size of the population. Change is inevitable, the essence is to do with the scale and the distinctive characteristic of living in a small community."

In most cases this will mean retaining existing levels in the face of loss of, or a reversal of the almost global pattern of rural depopulation, though there may be cases (as in the crofting communities 100 years ago) where the existing population is above an optimum and suggests redistribution or resettlement initiatives. One example is used here to illustrate that the access to land (albeit in small measure) and, more importantly, security of tenure of that land, has been a critical factor in supporting the crofting communities to maintain a population at or above a threshold level. This level, defined not only by the population trends for the area, but also by the ability to support vital services and facilities, as well as a critical, if unquantified intellectual vitality, will be different for each geographical location. This makes it difficult for cross-comparison with other rural areas, but also contributes an element of uniqueness and self-identity to each area

Table 1 shows a comparison between the (physically) apparently very similar, and geographically adjacent islands of Coll and Tiree, in the Inner Hebrides of Scotland.2 The comparison could hardly be more starkly presented. Tiree, with its embracement of crofting, (long branded as agriculturally 'inefficient', and frequently labelled 'primitive', 'backward' and 'anachronistic'), has managed to retain a much more vibrant rural community then its neighbouring island of Coll, which by any standards is facing severe social difficulties. The difference is not entirely due to the increasing economic difficulties faced by commercial farmers, for most farming activities in the Highlands and Islands are marginally profitable at best. It is also due to the highly diversified occupations pursued by crofting families.

This general relationship between the crofting communities and the non-crofting communities within the Highlands and Islands can also be found by comparison of other island and west-coast mainland communities. This is illustrated in Table. 2. There is a much greater contrast, of course, between these crofting communities, whatever the extent of their problems, and the vast areas of the Highlands and Islands which have been cleared of their human inhabitants (through coercion and also economic necessity) and never successfully repopulated.

Traditionally, the poor soils, unreliable climate, and small holdings have restricted crofting agriculture to a part-time or even spare-time activity, which in turn has made it necessary for crofters to acquire more than one source of income.(Grant, 1983). This phenomenon of pluriactivity is now recognised as having an important impact as a strategy to stimulate and support rural development, not only within the crofting counties of Scotland, but also throughout Europe (Brun and Fuller 1992; Oedl-Weiser 1994) and beyond (Chambers 1987).

Many attempts have been made to solve the rural development problems of Highland Scotland, from the earliest attempts at structured responses in the 18th century, to the present day trends of core vocational training, to encourage and/or persuade and/or force crofters to renounce crofting agriculture in favour of specialisation in a single main employment. Despite these attempts crofters have held stubbornly to their diverse sources of employment, but only relatively recently has 'pluriactivity' (the holding of many sources of income) been officially recognised and valued as an effective mechanism for retaining population, a wide skills base, and a varied local economy, (Bryden and Fuller, 1988). It has recently been propounded that the distinctiveness of the north-west of Scotland has been "based upon divergent rather than arrested growth" and that "crofting was the dynamic adaptation of a developing society" with the result that "in the north-west Highlands crofting may represent a cultural adaptation to adversity" (McLeery, 1993).

Table 1: Comparisons of the islands of Tiree and Coll

Comparisons	of Tiree	and Coll
Land Area Km^2	79	68
No. of Crofts	275	8
No. of Farms	4	10
No. of Beef Cows	1,250	313
No. of Breeding Sheep	5,850	3,990
Population Trends		
Peak population	4,453 (c. 1831)	1,442 (c. 1841)
% Population Decline	51	70
To 1901	51	70
To 1951	49	70
To 1971	12	31
Population in 1981	783	153
Population in 1991		

The economic comparison between Tiree and Coll can also be extended to the cultural and environmental attributes of other crofting areas, (Rennie 1986, 1991a & 1991b; Bryden 1991, Curtis et al 1991). It is no coincidence that the areas which are strongest in their retention of the crofting system are also those in which are strongest in the retention of their cultural and linguistic distinctiveness of Gaelic (the Western Isles, Inner Hebrides, and parts of the west coast mainland) and Norse (Shetland Islands) (e.g. MacLean and Carrell, 1986).

The environmental case for crofting has recently attracted some very favourable, high-profile publicity (SCU, 1992). Put simply the argument is that well-practiced crofting agriculture encourages a rich diversity of small patches of different habitats within the boundaries of each croft, and, taken together, the patchwork of these small crofting units creates a complex mosaic of habitat types across the landscape. This variety of habitats in turn supports a wider variety and number of species (animal and plant) than could normally be found in the huge amalgamated fields of intensive commercial farming enterprises. In this respect, the distribution of the Corncrake (Crex crex) a bird increasingly limited to the Western Isles of Scotland, has become something of a symbol which epitomises the environmentally friendly nature of low, input, low output, additive-free crofting agriculture.

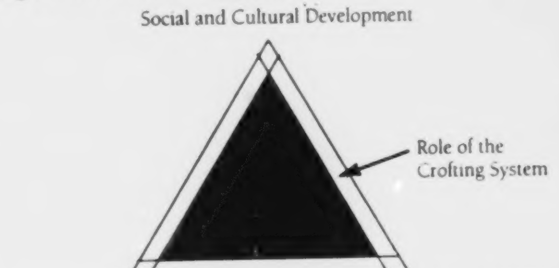
Table 2: 1990 Crofter livestock numbers in larger Crofting Islands

	Breeding	Beef Cows	Breeding	Ewes
	Head	% Of Total	Head	% Of Total
Shetland	1,705	80	160,120	90
Lewis & Harris	375	87	112,020	98
Uists & Barra	2,480	98	47,660	95
Skye	2,140	85	86,700	85
Total	6,700	88	406,500	91
Seven Crofting Counties	25,100	23	636,350	49

Closer investigation further supports the close relationship linking the economic and environmental well-being of rural communities with culturally strong communities, confident in their self-identity and with a belief in their distinctive value-systems. In terms of our need to define 'sustainability' therefore, it is abundantly clear that it is impossible to limit our deliberations to the effect of promoting environmental sustainability without also considering the economic and socio-cultural impacts which may result from these actions. The need to treat sustainability on this holistic model is akin to being the rural development equivalent of the Heisenberg Uncertainty Principle in physics which states that the velocity and the position of an object cannot be measured exactly at the same time, even in theory.

When we measure "efficiency" only in terms of the monetary return, without considering the socio-economic and environmental effects of these actions, we are only looking at a part of the problem, and more importantly a part which is changed in its context and value as a result of being viewed in isolation from the other integral components. In terms of our previous schematic presentation of the three components of development, figure 2 can be used to illustrate the central and unifying role which a 'way of life' such as the crofting system can satisfy. This has important ramifications for the manner in which we attempt to stimulate and secure rural development activities.

Fig: 2 The role of the crofting system


Social and Cultural Development
Role of the Crofting System
Economic Development
Environmental Development

The component of scale is another important factor in our considerations of local and rural sustainability, for the checks and balances by which we evaluate sustainability at a regional level may permit local 'imbalances' and 'inconsistencies' which are perfectly coherent with an ethic of self-reliance and sustainability when viewed even from a modest distance.

In this regard it is important to note that one of the very few attempts to record the experiences and lessons learned for sustainable praxis has studied community-based rural development initiatives in Scotland which contribute to economically viable and self-sustaining development by the careful use of the resources base, (Bryden and Watson 1992). Community sustainability was taken to mean "the long-term capacity of the community to regenerate itself in social and economic terms" and it is significant to record that over 75% of the initiatives they studied were set up by local people themselves, though most initiatives had not placed the consideration of 'sustainability' among their targets, but rather had acted according to perceived local needs.

RECENT DEVELOPMENTS

As might be expected, even with this apparently rosy perspective, the Crofting communities are not without their own problems. For many generations we have been looked upon as impoverished small farmers clinging desperately to outmoded attitudes, and it is only within the last ten years that self esteem and a high, positive profile has been engendered, (particularly since the formation of the Scottish Crofters' Union as a highly motivated "rural community association"). Nevertheless, many difficult issues remain.

The global failure for intensive, production-driven agriculture to contribute substantially to relieving rural underdevelopment and multiple deprivation is perhaps not hitting crofters as hard as commercial farmers, but the knock-on effects are significant. This is particularly true for the production of sheep-meat which is strongly dependant upon government subsidies. The fact that crofting agriculture is a consistent but very small part of the total income of crofting households provides a buffer against over-dependence upon any one sector of employment. Recent work throughout Europe has indicated the wide extent and high reliance of farming households on securing diverse sources of off-farm income, (Brun and Fuller 1992; Mills 1983). In this respect crofting is a well-seasoned trail-breaker.

As a consequence of the inalienable legal right to pass the croft land to their descendants (or, allowing for local objections to be raised) to whomsoever the sitting crofter should choose, there are many people today who have only a passing interest in land management for agricultural or livestock-rearing purposes. In many villages the croft has passed to descendants who have moved away from the are and are unlikely to return. These 'absentee crofters' are being increasingly challenged, officially and unofficially, to either make use of this land or to pass it (temporarily or permanently) to someone who will make use of it. This is a problem which is being tackled, but in reality is only a tiny proportion of the problem which 'absentee landlords' present to the viability of good community and rural development.

Two other scenarios are more common. Firstly, those who retain or obtain a croft for the purposes of building a new house in the village. Secondly, those who retain a croft, and while they do not fully utilise it themselves, are unwilling to let others do so.

The first point is extremely important for the context of sustaining rural communities, for the ability to retain and attract new villagers and young families is of fundamental value in maintaining economic viability, cultural integrity, and ultimately, sound environmental management. The special circumstances of crofting tenure mean that commercial banks will not give mortgages for building new croft houses (if the loan goes bad the bank cannot claim the house in repayment because the crofter has a legal guarantee of security of tenure). For this reason a special system of government grant-and-loan is operational to facilitate the construction of new croft houses. A recent survey (PIEDA 1994) into this system has indicated that 88% of those questioned indicated that the scheme had been important in allowing them to make a commitment to living in the area. In the vast majority of cases, building would not have gone ahead at all without the assistance from the scheme, and in many cases the respondents indicated that their only other alternative would have been to leave the area.

In this same survey, it was shown that without the scheme, 63% of new croft houses would not have been built, and 25% of improvements would not have been made because the applicants would have been ineligible for any other assistance. In an area like the Western Isles, which contains around 34% of Scotland's 17,600 crofters and where 2 out of every 3 houses in the rural areas are croft houses, this is a very substantial support. Unless it be thought that this is simply a social hand-out by the government, however, the same report substantiates the SCU claim that crofter housing is the cheapest form of encouraging house-building open to the government, by drawing attention to the fact that every £1 of government assistance generates a further £2.50 spending in the local economy.

The second point, those who do not use the land but, by their continued occupation prevent others from using it, is less clear cut. While it is undoubtedly true that some of those people who are currently 'absentee' may return to their croft upon retirement, there are also many people whose main employment, life-style, and/or inclination is not inclined towards working their croft to its full extent. A new "Crofters Outgoers" scheme has been instituted by the Crofters Commission (the government body charged with the administration of crofting legislation) and the Western Isles Local Enterprise Company (a semi-public local development agency) to encourage aged and/or infirm crofters to pass their croft to a younger crofting family, with a small amount of assistance being directed towards both the outgoing tenant and the new crofter. This has been operational barely one year, but has had some success in certain localities.

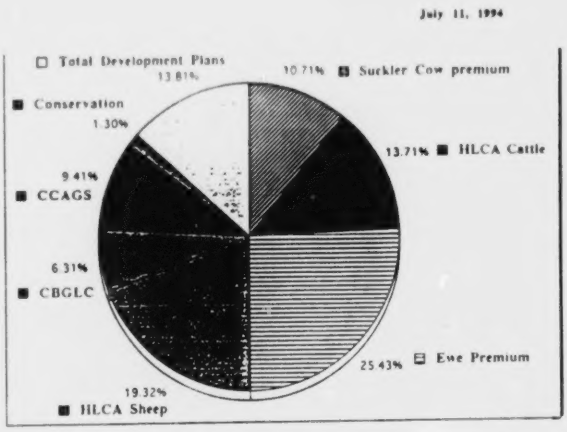
It is far more difficult, however, to persuade a fit, active, professional wo/man to either use their croft or part with it. Ideally a system of temporary lease is available, by which the tenant crofter is able to sublet the croft to a person who has the legal us of it for a contracted period of time, but this provision of the Crofting Act is infrequently utilised. This is partly through cultural and historical links (the crofters struggles with the British government and armed forces to obtain land rights are a vivid and not very distant memory for many), and partly pure economics (crofting agriculture is subsistence level at best). We have yet to make the break to ensure the best and most productive use of land in crofting villages by those who are best able and inclined to work that land.

There are three recent initiatives which I would like to comment upon in relation to the experience of the crofting communities offering potentially transferable skills for promoting rural development and sustaining rural communities.

In an attempt to calculate the impacts of modifications to the crofting system which would maximise the environmental potential, an approximation of the total amount of state support for crofting has been calculated for the year 1990 (SCU/RSPB 1991) (Fig. 3). This calculation was primarily to identify alternative uses of central support and to highlight the poor support from environmental sources of finance into the crofting system, despite the agreed high level of environmental returns. By focusing upon the agricultural component of crofting, however, a completely false picture is presented of the total crofting economy. While it can be viewed that there is a considerable investment by the state in crofting agriculture, despite its low profitability (Kinloch & Dalton 1989 & 1990), this argument ignores three fundamental points.

Firstly, that the financial investment in crofting agriculture by the State is negligibly small in comparison to the national expenditure on farming - barely 1-2% in total (Bryden 1989). (and this in areas which do not contribute to the problems of agricultural surpluses). Secondly, that the financial contribution of crofting agriculture to the total wage bill of the crofting communities is also extremely small (possibly as little as 10% of the total) although because of the great diversity of crofter employment this is extremely difficult to verify. Thirdly, this level of investment is usually substantially multiplied by the 'knock-on' effect which is generated by enabling the rural population to remain within their chosen area, create employment and training opportunities, and to contribute to the varied societal activities which embellish upon the basics of human existence.

Fig.3 **Aspects of state support for crofting agriculture.**



Existing Support System for Crofting

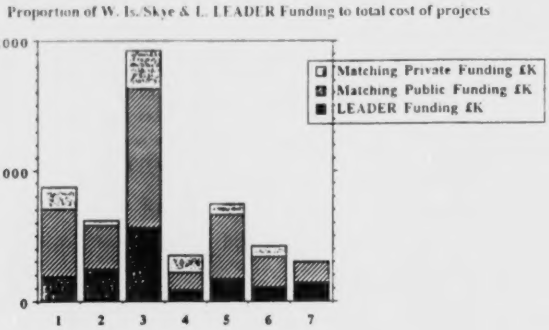
Total = £23.5 million in 1990

An example of this is reflected in the uptake and innovation resulting from the LEADER Programme for rural development which was initiated by the European Union (Rennie 1994). Though the scope of the activities generated by this programmes is important for the broad context of this paper, it is outwith the mainstream of my current argument, except to point out that the flexibility of LEADER was exploited to the full in the crofting communities of the Western Isles and Skye & Lochalsh, where 3.5 times the amount of LEADER investment was generated by community groups and entrepreneurs securing matching funding (there own and/or other grants and loans) (fig. 4) Several important points for the implementation of integrated rural development initiatives were also gathered from this study of the LEADER programme, (Rennie 1994) which will be included in the conclusions to this paper.

"The aim of participatory development is that it will help to bring about a shift in power in favour of rural people which can be sustained after the community worker has left"...... "There are a number of similarities between the discussion of sustainability and that of community development, emphasising decentralisation, self-sufficiency, balance, and small-scale development." (Hodge and Dunn 1992)

It has been suggested on several occasions, (e.g. Blowers 1992) that local communities should be much more involved in planning for a sustainable society, and that there are a number of similarities between the discussion of sustainability and that of community development (Hawker et al 1989; Rennie et al 1990; Hodge and Dunn 1992). It is for these reasons that many of us place the greatest hope for rural revitalisation and positive action in the fostering of direct community involvement with the rural development process. At the very least it is necessary for these communities to establish positive working links with the formal agencies responsible for the formulation and implementation of development policy.

Fig.4 **Western Isles / Skye & Lochalsh LEADER funding leverage.**



To give one small example from my own experience, the realisation of the mounting problems facing the community in the island of Harris, in the Western Isles of Scotland resulted in a joint approach by three development agencies (the local development company, the local government authority, and the regional environmental protection agency) to commission an integrated development plan to address the specific problems of the area, (Rennie 1993b). This work can be summarised as consisting of four main parts:-

1) Investigation of the development activities proposed for the area by each organisation with any locus in development and training (largely a desk-top exercise which integrated the current forward planning information of the agencies).
2) The conduct of a community survey (by an anonymous questionnaire sent to each household) to determine demographic details, local opinion of key development issues, and local needs (in terms of employment and training, housing, services, environmental issues etc.)
3) Preparation of an action plan which identified a coherent strategy for local development, suggesting short, medium, and long-term activities which would fill a gap between local aspirations and the ability of the local development agencies to deliver.
4) the creation of a local Development Trust, a separate legal entity selling shares of £1 to the local community, with a Board of Directors comprising a representative from each of the participating development agencies, together with elected community representatives. The function of this Trust will be to stimulate and promote development appropriate to their area, and also to function as a democratically accountable local development body, securing funding contracts from the agencies in return for delivering local development activities which meet the needs of the island's population.

The methodology, background, and action-agenda for this Integrated Development Programme has been documented (Rennie 1993b) and is an extension of other such community profiling and action research studies in Scotland, (e.g. Rennie 1990; Mackie et al 1988). There are also similarities with the community animation process for supporting rural development undertaken by OAR in Austria, (Oedl-Wieser 1994).

The final example which I feel is relevant to this discussion, is the purchase about one year ago of 8500 hectares of land by the community of Assynt in the north-west mainland of Scotland. As explained previously, crofters are generally tenants rather than land owners, and this of course has other positive and negative consequences. The circumstances of the Assynt community getting together to purchase the land on which they live and work are particular and unique, even in the context of the Scottish Highlands and Islands, so I will not dwell upon them here. Suffice to say that the land had previously been acquired by a Swedish Bank through a liquidation sale, and the community perceived a very profound, very negative change of fortunes if the land was to be sold to a number of absentee landowners as the liquidators proposed. The community placed a fair value on the land, and mobilised a highly popular campaign to raise the necessary funds to purchase the estate on the open market, while at the same time letting it be known that they would utilise a legal loophole to acquire the estate unopposed if these initial overtures were thwarted by the land owning establishment.

The fund-raising campaign captured a great wave of popular enthusiasm and the community campaign was eventually successful. The resulting benefits of being both tenant/resident of the land, and also the co-owner of the company which holds the title to the land, has encouraged a completely new wave of development activity in what was previously an ageing, relatively remote rural community exhibiting many, if not most, of the problems of rural decline within an advanced western economy. At one stroke the Assynt people recaptured their means of production (the land and its assets) and also reinvigorated their cultural identity and confidence. The results speak for themselves.

From a recent history of continual rural decline and managerial neglect, the Estate has begun to rejuvenate the local economy and plan for long-term development activities which will capitalise upon the assets of the area, while optimising the short and long term benefits to the local population. In the one year since acquiring ownership, the Assynt Crofters' Trust, in addition to all the existing rural development activities of lambing, livestock management, peat cutting, fishing, hay making, (not to mention the effects of croft rents and profits from local social events being retained within the community), the Trust has embarked upon the following initiatives:-

6.1 Development of Brown Trout fishing. North Assynt Estate has innumerable lochs. In consultation with recognised authorities the community is developing these resources as a source of income. Brochures have been produced emphasising the wild nature of the land and the fishing. Permits are available for day, week and month fishing. Locals fish free. Part of the fishing has been leased to a local man to set up a fishing school (with an emphasis on handicapped facilities). It is planned to put boats on the larger lochs and to date have two available for daily and/or weekly hire.

6.2 Development of Sea Trout / Salmon fishing. There are two rivers carrying migratory fish. The financial returns from these have shown a decrease in catches in recent years and advice is being sought on improving their performance. 15,000 smolts4 have been released into one of the systems. This is a long term project and involves looking at the whole ecosystem including presence and/or absence of woodland and changes to habitat management around these river systems.

6.3 Woodlands. The community is embarked on a survey of woodland potential for the whole estate both natural regeneration and planting. The first plans have been produced for one of the townships and involves planting 170 Hectares. There are also plans for natural regeneration along the rivers and loch systems. The survey is now taking in the neighbouring township and it is hoped to link the township woodlands throughout the estate making an large economic unit with employment potential rather than isolated blocks on the separate grazings.

6.4 Power Generation. The Trust has engaged consultants and have prepared a bid for two hydro electric schemes under the Scottish Office "renewable energy options". The schemes are capable of producing 500 kW between them.

6.5 Housing. A housing needs survey is being commissioned along with a survey of available land for housing. The community is also in discussion with Scottish Crofters' Union, and others, about the setting up of a Housing Association for NW Sutherland to take this forward.

6.6 "Industrial" development. The Trust is currently negotiating over the purchase of land and foreshore in one of the townships currently in the ownership of the HRC with a view to developing the pier and landing facilities for the local creek fishing fleet.

6.7 Torbreck House (a former shooting lodge for the Estate) has been leased to a high tech small enterprise which develops and markets Geographical Information Systems (GIS) for environmental monitoring and emergency incident management. This company was attracted to the area from the south of Britain following the Estate purchase by the community, and brought two highly skilled people in to area as well as creating two new jobs for local people.

6.8 Estate Management. Together with the Environmental Systems and various Departments of Edinburgh University the Trust is proposing a major research project with European Union funding. The aim of this initiative is to integrate local knowledge and/or concerns and/or visions with existing GIS and Artificial Intelligence systems. The project will involve the establishing of telecommunications links between the partners over ISDN (digital telecommunications lines) to include the input of indigenous knowledge, the transfer of skills and technology to the indigenous population and the development of a management tool for the economic and ecologically sustainable management of the natural resources with a high cultural and natural heritage value. It is hoped that the end product will have an wider economic and educational value.

Regardless of the success of this latter project, it can be seen that the Assynt Crofters Trust has already contributed more in one year to the viability and self-reliance of their community than the one hundred years of feudal landlordism which they replaced.

WHAT STEPS CAN BE TAKEN TO ENCOURAGE AND SUPPORT SUSTAINABLE RURAL COMMUNITIES?

In conclusion, I would like to return to the four main impediments to the development of sustainable enterprises in rural communities. The following steps are based principally upon the experience of the Highlands and Islands of Scotland, (Rennie 1994) but the basic premises are, I believe, widely appropriate and transferable, within "First" "Second", and "Third World" rural development scenarios, (Mills 1983, Chambers 1983).

Most of these points have been attempted in isolation and/or as small projects, but I am unaware of any initiative which has combined them all in a comprehensive development plan.

7.1 Lack of access to the means of production.

Access to the land and control of its resources for and by all of the local community is a primary requisite for long term sustainability. There are several positive actions which could assist this process -

7.1.1

The success of the crofting system of land tenure in providing long-term security and short-term flexibility should be capitalised upon by the creation of new croft holdings, and the extension of the principle to areas outwith the present crofting counties. This would include the breaking up of larger units into smaller holdings to encourage the resettlement of rural areas; and also the creation of Community Land Trusts for groups of Family Farms. To some extent this has already been seriously considered in several areas of Scotland, (Hunter 1985; Bryden et al 1990) but the implementation of ideas to action remains to be resolved.

7.1.2

Transfer Government-held rural land (including public assets, buildings, forest, etc.)to Community Trust ownership (with appropriate safeguards where necessary). These Trusts should have open membership categories for rural land-users and residents, and self-managing powers of decision-making.

7.1.3

Form a Federation of Community and/or Publicly owned land to achieve economies of scale for specialist management functions.

7.1.4

Build and consolidate the link between Community Land Trusts and Community Businesses to secure locally appropriate rural development and to minimise financial leakage from the local rural economy.

7.1.5

Create a land and rural development bank to facilitate community purchase and initial management of land and other community assets or resources. Link this with potential investment from Ethical Investment Trusts and a Government-backed Rural Aid Fund to facilitate investment in rural infrastructure and enterprise.

7.1.6

Investigate effects of semi-public body ownership and compel all land purchases utilising Public Sector finance to include democratic community representation in estate management.

7.2 Alienation from indigenous culture and identity.

7.2.1

A holistic approach to the concept of sustainable communities must be reflected in practical support across the broad spectrum of economic, social, cultural, and environmental development activities. It is important to seek a level of balance in these factors which not only reflects local needs and aspirations, but also ensures that measures to achieve 'sustainability' in one sector do not prejudice the sustainability of other sectors , and therefore of the community as a whole (Verhelst 1990). Among the requirements of such an approach are the following -

7.2.2

A multi-sectoral approach by development agencies, non-statutory bodies, and local community representatives may not be easy, but will help to build trust, a collective vision, and optimisation of available resources for the area.

7.2.3

In this respect, (real) participation by the community itself is crucial and non-negotiable in the creation of the collective vision of what, how, and why development activities should be initiated.

7.2.4

Following on from this, the development partners must approach the preparation of the range of development initiatives with an open agenda. There will obviously be areas in which certain partners will have a prevailing interest and/or concern, but to exclude certain topics from the outset, or to limit participation (by exclusion or withdrawn of interest) will not augur well for the collective visioning.

7.2.5

Secure official recognition for the validity of occupational pluralism and integrated land management strategies as important economic, social, and environmental mechanisms for supporting rural communities. This would include a lessening of the influence of agricultural strategies on countryside planning, and enabling environmental conservation and social provision (e.g. health, education, services) to play larger roles in rural employment creation.

7.3 Depletion of non-renewable commodities.

7.3.1

Initiate a compulsory environmental and social audit on all land which would be published and publicly maintained -

a) Commencing with all new land transfers and;
b) extending throughout the country

7.3.2

Prepare Management Plans, based upon the audit, which would be -

a) Conditional for Public Sector support
b) A facility for penalising deliberately detrimental land use practices
c) A forerunner of realistic Regional Land Use Strategies

7.3.3

The difficulties of overcoming bureaucratic inertia and vested interests against change require a clear lead at the political level, (local and national) as well as clear line-management for implementing collective decision-making across and between the relevant organisations and networks. Insincerity at the political level will breed reticence and duplicity at lower levels of project implementation, which will in turn work actively against integration and collective action.

7.3.4

There need to be clear links established to enable community democratic accountability access to specialist "no-strings" advice from external sources. These should be utilised in a manner which adds to and strengthens the local knowledge base, building capacity for self-reliance rather than reinforcing the need for external specialists.

7.4 Non-utilisation of (renewable) local assets.

7.4.1

In addition to the sensible utilisation of non-renewable resources, the proposed audits and local development strategies for land-based and human resources will need to include an action agenda for the improved use of local assets.

This will necessarily be dependent upon the specific characteristics of the local community, but two general action points would include:-

7.4.2

Tighten controls on the removal of small holdings such as crofts from the pool of community land (including 'disappearing' into 'Institutional ownership') and from amalgamation into larger 'commercial' units.

7.4.3

Ensure the identification and (if required) training of local community leadership (grassroots and well as elected officials) and encourage their function as community animators. The precise nature of their remit and responsibilities may be widely different between varied communities, but they should all work towards stimulating community participation in the development process and function as a local catalyst to initiate, support, and monitor the resulting development activities.

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FOOTNOTES:

1 25 South Galson, Isle of Lewis, Western Isles, Scotland, PA86 0SH

2 Pers. Comm.: Hugh MacLean, Chairman of the Crofters Commission, in a talk to Rural Forum Scotland in 1993.

3 With thanks to Bill Ritchie of Assynt Crofters' Trust for this personal communication.

4 Young salmon migrating to sea for the first time.

CONSUMER AFFAIRS IN REMOTE AREAS

W. Fischer. and A. Massey — Germany/Australia

ABSTRACT

> 'I know that people can stay alive on the earth only because they refuse to accept and confront certain truths. It is the defence mechanism of mankind which makes life tolerable. Truth is the great obscenity of our age. I found these notions wandering unbidden through my mind: all the newspaper and radio stations and television channels present the news and advertisements as if their only aim was to hide the awful truth about the human conditions: the way mankind has organised itself into anguished loneliness and festering inequality.'
>
> *Frank Hardy, 'The Obsession of Oscar Oswald', Carlton, Victoria, Australia 1983, Page 109.*

INTRODUCTION

This presentation deals with the economic, social, and legal implications of Consumer Affairs with special consideration of remote areas, and in particular in the large and remote area of North Queensland (Australia). As North Queensland faces specific social, economic, geographic, and climatic conditions, it is an example of a very difficult area for the imposition and enforcement of Consumer Affairs, which has basically four components: Consumer Economics, Consumer Protection, Consumer Information, and Consumer Education, as this is based on a concept conditioned to capital cities, rather than to the distinctive features of remote areas.

In addition, a further important aim of this presentation is to examine Consumer Affairs and Credit with special emphasis placed on the distributional effects of *Microeconomic Reform (Economic Rationalism)*; an economic policy which tries to improve efficiency regardless of the problems that may arise for certain groups of consumers (Carroll 1992, 7). It has been seen as a '*revival of what a variously called "free-market economics" or "libertarian" economics and political philosophy, whose basic premise is that State intervention is by definition a bad thing*' (Goldring 1987, 4).

But 'thus even if a particular Microeconomic Reform improves the efficiency of the Australian economy and thus increases our total income, it may make the distribution of income and wealth worse and it may therefore be undesirable to make the change' (Stanley 1993, 4). In a broader sense, it attempts to address the overriding question of what type of society, in particular in remote areas, do the Australian people wish to create? Social imbalance should be a '*challenge for economics to get more involved in social problems, when we consider the almost paradoxical experience, contrary to many economists' expectations, that even in the developed industrial countries the socio-economic problems have not really decreased, despite the rapid rise of social wealth due to science and technology*' (Rothschild 1992, 49).

With regard to the economy ethics should not be dismissed as irrelevant, nor should the sole concern be material goods and consumption: human values, such as the possibility of being in the paid workforce or simply the retention of dignity as a human being living in a remote area are just as important.

Deregulation had, as its starting point, the deregulation of the financial sector in the late 1970's. Designed to foster competition among financial institutions from Australia and overseas to produce a more efficient and expanding economy *(Wood 1982, 61-62)*, it was also intended to stop the dramatic decline in Australia's standard of living relative to that of other countries that has been evidenced in the last 30 years *(Harper & Leslie 1993, 84)*. Microeconomic Reform is based on the idea that competition solves major problems like poor services to consumers provided for instance by financial institutions; that consumers would receive financial products at the lowest prices; and disadvantages for individual borrowers (like lack of knowledge about numerous credit facilities) would decrease in the long term, provided that restraint of trade could be prevented by the *Trade Practices Commission and the Prices Surveillance Authority*.

Only limited research is currently available on the economic impact of consumer credit, and data on consumer credit in Australia are very restricted, with the exception of some publications of the Australian Bureau of Statistics, the Australian Bankers' Association, the Economic Planning Advisory Council, and the National Consumer Affairs Advisory Council. Virtually no relevant data collection on consumer credit has been undertaken in North Queensland, and for this reason some cautious estimates have had to be made.

CONSUMER AFFAIRS

The very existence of Consumer Affairs as a concern is an admission of the failure of consumer sovereignty, which means in short that consumers in the economy determine the production of goods and services by casting money 'votes'. Traditional rational consumers (so-called 'homo economicus') consistently make optimum decisions, as they are perfectly informed about the prices and all characteristics of all products and services for sale. The theory behind this 'homo economicus' sets the conditions under which the consumer maximises his satisfaction from a given budget and is able to identify whether one parcel of goods and services is preferable to another. These assumptions of consumer behaviour lead to the 'Law of demand', stating that the quantity of products and services purchased is inversely related only to the price. Of course, this holds only in theory. In the course of time it has been beyond doubt that the old fashioned (and related) concept of *Caveat Emptor* (sold as seen) has been denied for decades.

It is indisputable that market failure relating to the lack of sufficient information about price, quality, durability, availability, time and environmental performance of consumer goods and services exists. Consumer organizations in OECD countries agree that consumers do not have the collective power to make relevant changes in the marketplace, and not at all in remote areas. Consumers are not sovereign, this being a fiction as income is unevenly distributed; there is a lack of sufficient information about price, availability and quality performance of goods and services; and the widespread rise of marketing and the associated use of sophisticated techniques in selling products and services. The notion of the equality of bargaining positions is also most unlikely.

Within economics since the 18th century, especially during the period of the classics and the so called marginal benefit theory, it was persistently assumed that consumers made rational purchasing decisions as a result of underlying rational behaviour. Since the 20th century this has been challenged by, amongst others, the studies of *Thorstein Veblen (1857-1929)* and his famous book *'Theory of the leisure class'*, and *George Katona* and his numerous publications on consumer behaviour. It has since become obvious that beside economic factors like price, quality, durability, availability, time and environmental aspects, sociological and psychological factors are crucial.

Maynes asserts that *John Kenneth Galbraith (The Affluent Society)* stands almost alone among economists in stressing the role of advertising in creating and managing the preferences of consumers (Maynes 1976, 263). In attacking the received doctrines of economics, Galbraith stresses two major themes:

1. *Producers, Not Consumers, Are Sovereign.* Through successful advertising and salesmanship, producers/sellers "manage" the preferences of consumers. Thus, it is producers, not consumers, who ultimately determine the volume and composition of output.
2. *Many of the Wants Being Satisfied in Our Economy Are Non-urgent*, Even Frivolous. This follows from the notion that many wants are contrived by sellers and are not original with consumers themselves *(Maynes 1976, 264)*.

Basically and in a broader sense it should be conceded that Galbraith is right.

With regard to Consumer Protection it might be said that *'law reflects the spirit of the people whose law it is; and on the other hand that the laws are merely a superficial growth on an economic structure dictated by the will of the ruling class. In a modern pluralist society such as Australia, the truth probably lies between the two extremes (Goldring 1987,1)*.

Goldring asserts that *'the need for legal regulation of the activities of those who deal with consumers arises from the small minority of unscrupulous or reckless people who are not prepared to accept responsibility for the goods and services they provide'* (Goldring 1987, 7).

When introducing the Trade Practices Bill into the Commonwealth Parliament in 1973 the *Attorney-General (Senator the Hon L K Murphy QC)* argued:

> *In consumer transactions unfair practices are widespread. The existing law is still founded on the principle known as caveat emptor meaning "let the buyer beware". That principle may have been appropriate for transactions conducted in village markets. It has ceased to be appropriate as a general rule. Now the marketing of goods and services is conducted on an organized basis and by trained business executives. The untrained consumer is no match for the businessman who attempts to persuade the consumer to buy goods or services on terms and conditions suitable to the vendor. The consumer needs protection by the law and this Bill will provide such protection (Goldring 1987, 2).*

Basically it might be said that *'consumers are not interested in goods as such, but in their properties or characteristics. Thus the individual's constrained choice involves both the space of characteristics and the space of goods, linked through the consumption technology. Individual preferences determine the relative weights given to the various characteristics in making choices, and thus different individuals may choose different goods or collections of goods even though they face a common consumption technology'* (Lancaster 1991, 4). Furthermore, in economies in decline, especially those with high unemployment, consumers are urged to buy products made in their own country to help create jobs, assist defeating unemployment and avoid import penetration. Since 1986 the *Advance Australia Foundation* has urged Australians to buy *'Australian Made'*, and currently Queensland business organizations even encourage consumers to buy *'Queensland Made'*. Consumers as individuals should not have an obligation to consider what effect their purchasing decisions will have on the national or regional economy. In remote areas this creates a dilemma through relevant products and services not being available at the right time and location.

The United States made the first move in the area of consumer protection. President *John F Kennedy* in March 1962 delivered the first 'declaration of consumer rights' to Congress (*Troelstrup 1974, 23*).

1. *The right to safety* — to be protected against the marketing of goods that are hazardous to health or life.
2. *The right to be informed* - to be protected against fraudulent, deceitful, or grossly misleading information, advertising, labelling, and other practices, and to be given the facts needed to make informed choices.
3. *The right to choose* – to be assured, wherever possible, access to a variety of products and services at competitive prices, and in those industries in which competition is not workable and government regulation is substituted, there should be assurance of satisfactory quality and service at fair prices.
4. *The right to be heard* – to be assured that consumer interests will receive full and sympathetic consideration in the formulation of government policy and fair and expeditious treatment in its administrative tribunals.

The growth of consumer affairs has been encouraged since Ralph Nader published his attack on the US motor vehicle industry *'Unsafe at Any Speed'* in 1965.

In particular, the 'right to be informed' indicates a failure in the provision of proper market information to consumers. This is not only related to consumer goods and services but also to services provided by financial institutions, espousing the consumers' right to receive proper, clearly understandable information about 'invisible' products like credit. It might be argued that *'legislation is necessary to enforce standards of market behaviour, and the existence of effective legislation and consumer protection authorities creates an awareness of the rights of consumers throughout the community* (Goldring 1987, 4).

Swan has asserted that *'to suggest that the consumer can be fully protected by regulations during a continual process of evolutionary change is of course complete nonsense'* (Swan 1987, 12). Nevertheless, this might lead to questions about the costs of regulation rather than to the principal issue of social obligations to consumers who failed in managing their private consumption and credit properly.

Basically two national bodies presently act as Australia-wide Consumer Affairs Administrations. The first is the *Federal Bureau of Consumer Affairs*, a division of the Attorney-General Department in the portfolio of the Minister for Consumer Affairs, with branches only in *Adelaide (South Australia)*, *Sydney (New South Wales)* and *Melbourne (Victoria)*, that advises the *Attorney-General* and the *Minister for Consumer Affairs* on matters of consumer affairs. The *Trade Practices Commission* which is responsible to the Attorney-General is the second body and promotes, through the consumer protection related Clauses of the *Trade Practices Act (1974)*, fair trading practices in industry in general and competition in the marketplace at the present time dealing with, for instance, a *Code of Banking Practice*. The Trade Practices Commission has regional offices in *Perth, Hobart, Adelaide, Melbourne, Sydney, Newcastle* and *Townsville*. The regional office in Townsville is presently limited to 3 permanent staff; a director, a deputy director, and an office administrator.

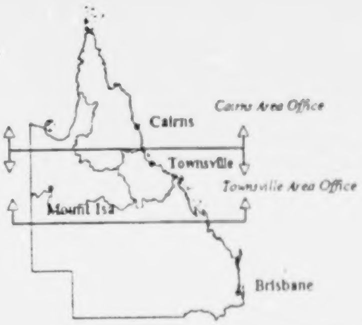
In addition the *Prices Surveillance Authority*, operating under the Prices Surveillance Act (1983), monitors prices in different areas where restraint of trade affects the economy, such as attempts by business to fix prices or reduce competition, holding public inquiries such as the *Inquiry into the Profitability of Credit Cards*.

Due both to the fact of Australia's federal system of government and the Australian constitution, consumer protection is a matter for both Commonwealth and State or Territory legislation. Therefore to facilitate uniform consumer affairs legislation the *Standing Committee of Consumer Affairs Ministers (SCOCAM)* was established (*OECD 1993, 19*). Currently SCOCAM deals, for example, with the Uniform Credit Legislation.

In Queensland the former *Bureau of Consumer Affairs* was transferred from the Ministry for Industrial Affairs to the Ministry for Justice and Corrective Services on December 1989, which indicates a review of its aims. Presently, the *Department of Consumer Affairs* is under the *Ministry for Emergency Services, Rural Communities* and *Consumer Affairs*. In view of its location in the major city and capital Brisbane, and given the problems involved in solving complaints at huge distances in remote areas, regional offices were established in 1989 in Townsville and Cairns in North Queensland (OECD 1993, 22).

The regional offices of the *Department of Consumer Affairs Queensland* in Townsville and Cairns cover an enormous and remote area with long distances between cities. The Townsville Regional Office area is from Mackay in the south to Mount Isa in the west and Cardwell to the north. [PB]

The Townsville Regional Office consists of three permanent staff in 1993, being one *Senior Investigations Officer; one Investigations Officer; and one Administrative Assistant*. The Cairns Regional Office has two permanent staff, consisting of one *Senior Investigations Officer, and one Administrative Assistant*. Evidently both regional offices are not over staffed. This area (Mackay-Townsville-Cairns) does have three trade measurement officers who are also part of the Department of Consumer Affairs, their duties being mainly to check weight loads, scales, pumps for fuel etc. to ensure correct measurement is effected.



Map of Regional Office Jurisdiction Areas Department of Consumer Affairs Queensland North Queensland 1993

For the Townsville Regional Office an annual budget of roughly $5,000 for travel expenditures is given in 1993 to cover the presence of an officer for one week per year in Mount Isa and approximately five times for two days per year in Mackay. Obviously this is far from being funded properly, because consumers in these areas need the personal presence of an officer to submit their complaints and receiving personal advice more often. Both regional offices of the Department of Consumer Affairs have to monitor more than 40 Acts related partially to consumer affairs of which the Auctioneers and Agents Act causes the most workload (*see Appendix 1*). Obviously there is no capacity to handle credit counselling given the fact of the under staffed regional offices in Townsville and Cairns, and given that credit counselling requires highly skilled experts.

AN OUTLINE OF NORTH QUEENSLAND

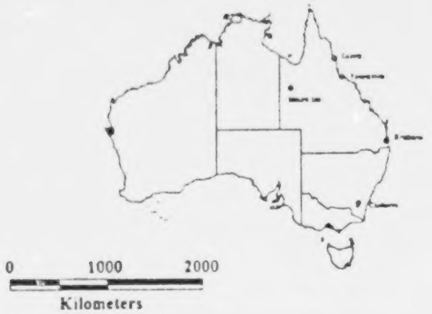
The area commonly referred to as North Queensland is based upon an aggregation of the Northern, North West, and Far North statistical divisions of Queensland. Together these regions occupy an area of some 688,563 square kilometres located in the north eastern corner of the Australian continent, containing three major cities, these being Cairns to the north, Mount Isa to the west, and Townsville in the south eastern corner. North Queensland's population centres are located great distances from both the state capital of Brisbane and the national capital of Canberra. By way of illustration, the straight line distance between Townsville and Brisbane is some 994 kilometres, a distance equivalent to that between Paris and Zagreb, London and Berlin, or Philadelphia and Chicago. The distance to the national capital Canberra is 1,625 kilometres, being comparable with Berlin to Moscow, London to Lisbon, or Kansas City to New York City.

In terms of land area North Queensland is larger than many European nations, yet lags in terms of population and population density, as shown in table 1.

Table 1: Comparative Statistics

	Area (km2)	Population (persons)	Population Density (persons per km2)
North Queensland	688,563	410,181	0.59
Finland	338,145	5,026,420	16.50
France	543,965	56,893,200	105.30
Germany	356,854	79,532,200	224.60
United Kingdom	244,110	55,486,800	235.80

Although this gives an impression of a large, sparsely populated region, this is only partly true. North Queensland is highly urbanised with 57% of the population residing in the three main cities. The urban regions of North Queensland are hence relatively densely populated, having 5.1 persons per km2, whilst the rural areas are relatively empty, having a population density of 0.28 persons per km2.

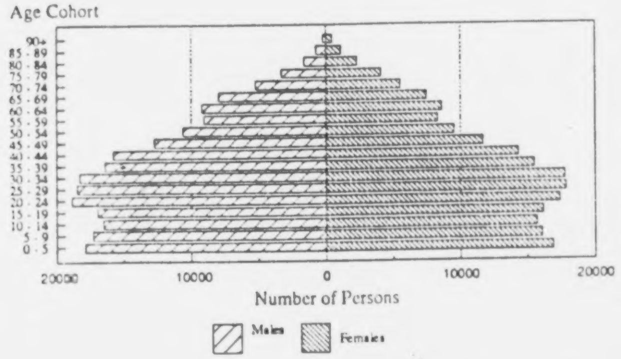


Map of North Queensland and Australia

North Queensland displays a diverse climate, geology, and population structure. These differences are reflected in the three main cities. Cairns, a city of 84,772 persons, is located in the Wet Tropics World Heritage Area and adjacent to the Great Barrier Reef, displaying a large diversity of native flora and fauna. Cairns is the tourism centre of North Queensland, receiving some 1,324,000 tourists each year (*Bureau of Tourism Research*), with the hinterland being the dairy and tobacco production centre for North Queensland. Rainfall averages 2032 millimetres per annum, with temperatures ranging between 16° and 32° Celsius. Townsville, the southernmost population centre, lies on an expansive plain located in the dry tropics. Average rainfall seldom exceeds 1155 millimetres per annum, temperatures ranging from 13° to 31° Celsius. With a population of 124,981 persons, it is the administrative centre of North Queensland, being the northern seat of many State and Federal government offices and maintains a large contingent of defence force personnel. Although primarily an administrative and educational city, the region is diversified into a variety of industries including manufacturing, and agricultural production primarily centred around sugar cane and beef cattle production. Mount Isa, with a population of just 24,737 persons, is located in what can best be described as the dry, arid inland of Australia. Receiving only 417 mm of rain each year together with over 9.6 sunshine hours per day, temperatures range from 90 to 37° Celsius. Mount Isa borders on the desert inland of Australia to the west, and the edge of the cattle grazing country to the east. Mount Isa is a city founded upon the mining industry, employing 34.9% of the work force.

The population of the North Queensland region is relatively young, with 65% being aged less than 40 years of age. Males outnumber females 51.2% to 48.8% and tend to be younger. [PB]

Figure 1: Age/Sex Distribution North Queensland



Source: ABS Census 1991

The North Queensland population has a varied and diverse ethnic background, due to the nature of economic development, where immigrant labour was extensively employed in the expansion of mining operations at Mount Isa and the agricultural development, particularly that of sugar cane, along the eastern coastline. The table details the place of birth of the North Queensland population for some of the major ethnic groups.

Table 2: Birthplace of North Queensland Residents*

Birthplace	Proportion of Population Born there	Birthplace	Proportion of Population Born there
Australia	82%	Netherlands	0.4%
United Kingdom	4.7%	Philippines	0.4%
New Zealand	2.2%	Canada	0.3%
Italy	1.4%	Yugoslavia	0.2%
Germany	0.7%	Ireland	0.2%
USA	0.5%	South Africa	0.2%

Although located on the fringes of south east Asia, North Queensland remains a predominantly white, Anglo-Saxon, region. Population increase in the region has been historically stable, with an annual growth rate of 1.5% being recorded in the past 13 years, and a rate of some 2.2% prior to that (*TERU 1993, 19*). However, this growth is not evenly distributed amongst the region, with some centres growing rapidly, and some declining.

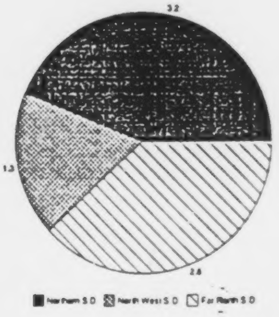
Cairns is currently growing at 3.7% per annum (*CERU 2/1993, 12*), with Townsville growing at 1.7% per annum (*TERU 2/1993, 44*). Population in Mount Isa has, however, been declining by 0.7% per annum since 1981 (*TERU 2/1993, 44*), and will continue to do so in the future. Overall, the population of North Queensland is expected to grow steadily throughout the next decade and a half to a total population of 520,500 by the year 2006, the bulk of this growth occurring along the eastern seaboard.

The latest data on household and family composition (*ABS 1991 CDATA91*) sheds light on family composition in North Queensland. The predominant form of household structure is the two person household, of which 39,134 of the 125,437 households in North Queensland are composed. Over 71% of these households are couples without offspring, 13% are sole parents, and 16% are group households. There are 23,167 households that are composed of just one person, whilst 7,198 are composed of six or more persons, whilst the remainder are two parent family households. The nature of occupancy of households displays one of the predominant features of Australian society, this being the strong motivation towards home ownership. Fully 70.5% of all households in North Queensland are either purchasing their place of residence, or already fully own it (*ABS Catalogue No. 6533.0*). The obvious implication from the above is that changes in the cost of home ownership, particularly in terms of interest rates being charged on mortgages, impacts on a large section of North Queensland society.

North Queensland has a labour force of some 218,900 persons as at May of 1993, of which 68.5% were working on a full time basis, 20.8% were working on a part time basis, and 11.9% were officially listed as being unemployed (*ABS Catalogue No. 6201.3*)[1]. Unemployment in the North Queensland region tends to be marginally higher than both the state and national figures, oscillating since January 1992 around 11%. The majority of those employed are wage and salary earners (80.5%), with the next largest group, the self employed, consisting of 18,353 or 10.2% of the workforce. Employers make up just over 8.2% of the workforce, whilst those working as unpaid help (including those receiving pay in kind such as board and lodgings) comprise the remaining 1.1% of the workforce (*ABS CDATA91*). The two major occupational groupings are labourers (16.7%) and tradespersons (15.1%). The smallest groupings are those of paraprofessionals (7.2%) and plant and machine operators (9%). Only 27% of all residents over the age of 15 have had formal education or training beyond high school level, 16% have had training in either skilled or basic vocational work, and a further 5% attaining associate or under graduate diplomas (*ABS CDATA91*). Of the 6.5% of the over 15 year old population that have formal tertiary qualifications, 0.8% of these have qualifications above Bachelor degree level, and 0.7% have Bachelor degree qualifications plus post graduate diplomas.

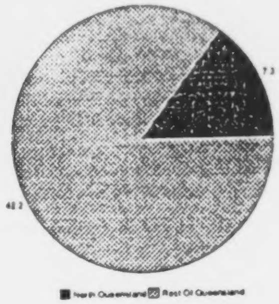
One of the most appropriate and consistent indicators of the level of economic activity in a region is Gross Regional Product (GRP), a measure that on a regional scale is consistent with Gross Domestic Product. GRP is simply the total expenditure on goods and services produced and sold to final users in that region, plus the value of exports produced and sold by the region, less imports purchased by the region (*TERU 1/92, 9*). GRP data for the North Queensland region is presented below, together with regional GRP as a proportion of Queensland GRP.

Figure 2
North Queensland GRP 1989/90
Billion Dollars



Source: TERU, 1993.

Figure 3
Queensland GRP 1989/90
Billion Dollars



Source: TERU, 1993

In 1989/90 total GRP at factor cost for the North Queensland region was A$7.3 billion, with the level of Queensland GRP being A$49.5 billion. In terms of output, North Queensland is responsible for 14.7% of State GRP. In terms of GRP per capita, North Queensland performs marginally better than Queensland as a whole, with a GRP per capita of A$17,797 as compared to A$17,052. This implies that the North Queensland population is relatively more productive than the State's total population. When compared to the national GDP per capita figure of A$19,031 however, the North Queensland figure is somewhat less impressive.

It is instructive to compare five of the major demographic and economic measures against both the rest of Australia and selected other nations. This is done in table 3 below.

Table 3: International Economic and Demographic Comparisons*

% of Population Urban	GDP/GRP Per Capita ($US)	% of Population Urban	% of Population Rural	Birth Rate Per 1000 Population	Death Rate Per 1000 Population
North Qld	14,238	57	43	16.5	6.2
Australia	17,080	85	15	14.8	6.9
Finland	26,070	62	38	13.1	9.8
France	19,480	74	26	13.3	9.2
Germany	24,170	85	15	11.4	11.6
UK	16,070	92	8	13.8	11.2

Exchange rate vagaries aside, it is clear that North Queensland has a significantly lower GDP per capita than any of the other areas shown, being some US$1,832 lower than the nearest comparable nation, the United Kingdom. This would imply that the standard of living in North Queensland is somewhat less than in the other areas. Demographically, North Queensland has the highest proportion (some 43%) of its population residing in rural areas, with the observed lower levels of rural wages and conditions, partly explaining the GDP per capita figure. Finally, North Queensland differs markedly from the other areas in terms of birth and death rates, having both the highest birth rate per 1000 population and the lowest death rate per 100 population of the areas compared.

Due to legislative arrangements concerning minimum school leaving age and mandatory retirement age employed persons are, in the vast majority, aged between 15 and 65 years of age. The maximum working life, therefore, of a North Queensland resident, currently stands at 50 years. The majority of North Queensland resident earn less than $25,000 per annum, with the modal income bracket being between $5,001 to $8,000 (*ABS CDATA91*). The relatively low income level is a function of both the lack of qualifications of the workforce, coupled with the correspondingly high numbers of persons employed in the wholesale and retail trade (which traditionally does not pay the majority of its work force high wages), together with those employed in public administration and defence (which, although providing secure job tenure, is also not a provider of high wages).

The most accurate and complete survey of household expenditure patterns is the Household Expenditure Survey, conducted at irregular intervals by the Australian Bureau of Statistics, used here to illustrate spending habits and patterns in North Queensland (*ABS Catalogue No. 6533.0*). The single largest expenditure category for households is income tax, this accounting for $97.85 of the average weekly household income of $539.63 (gross). Food and non alcoholic beverage purchases account for 15.7%, and transportation costs some 12.9%, of total expenditures. Total expenditure on housing totals $111.44 per week, or 20.7% of gross weekly household income, the largest single expenditure category. The smallest delineated category of expenditure is that of superannuation and life insurance, being just $13.99 per week. This reflects the low priority that savings has amongst the North Queensland population as a whole, as superannuation is the major form of retirement savings scheme in Australia at the present moment.

For rented accommodation, the modal weekly rental for all types of rented accommodation (i.e. including houses, flats, caravans, etc.,) is $48 to $77 per week, with the majority of North Queensland residents paying less than $167 per week. For those residents who are purchasing their dwelling, the modal monthly mortgage payment is $301 to $400 per month, or $71.67 to $95.23 per week. The majority of North Queenslanders paying off their homes pay less than $625 per month, or $148.80 per week, on mortgage payments.

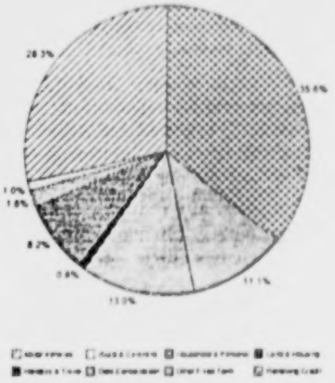
Simple analysis of the Household Expenditure Survey reveals that, after superannuation and life insurance payments, some $19.53 per week is not accounted for by either commodity and service expenditure or taxation. In short, it would appear that the average North Queensland resident would have just $19.53 per week remaining after commitments which could be saved. If superannuation and life insurance payments are included, average weekly savings become a maximum of $33.52 or 6.3% of average weekly income. From this it may be correctly inferred that North Queensland residents favour consumption over savings.

Current interest rates do little to encourage savings through the banking system at this point in time. Since early 1992 they have been declining from some 4.75% for an ordinary savings account to 2.75%, and from 7.5% for a one year fixed term account to 5.25%. These rates, and their counterparts in low lending rates, produce pressures that again turn people in favour of consumption in lieu of savings. Current taxation law further deters savings in forms other than the "savings" made when purchasing a home that is intended not to be the persons main place of residence. Taxes are levied on capital gains made on any asset other than the main place of residence (which, under certain circumstances may also be subject to this) including shares, stocks, and real estate holdings. Income is the main target of taxation, with interest earned on savings deposits, bank bonds, and fixed term deposits also being taxed.

Current tax laws also discourage employees to seek better returns from different superannuation schemes other than those sponsored by an employer. If an employee makes contributions to a fund other than that sponsored by his or her employer, that employee is subject to tax on any contributions made to that fund. Complex laws also exists limiting the final superannuation payout to a fixed multiple of the contributors income in the last years of employment. This creates a situation where a contributor may not be able to access all of their contributions and earnings, in effect having over-capitalised on their superannuation. In short, this means that savings of any sort are not encouraged by the current legislative and taxation environment, save for the employer contributions to superannuation which serve only to lessen the perceived need for other forms of savings by the general populace. The end result is a bias towards present consumption rather than savings, and towards making that consumption on the basis of *future income that can be spent, rather than saved*.

The following presents data on new loan commitments by all lenders (banks, building societies, credit unions etc) to borrowers in October of 1992. Total loan commitments of both a fixed term and a revolving nature in October 1992 in Queensland were valued at $337,300,000.

Figure 4: Loan Commitments by Type All Lenders - October 1992 Queensland



Source: ABS Catalogue No. 5642.0.

The major category for new loan commitments is clearly for revolving credit, this being for credit instruments such as credit cards and overdrafts. The second greatest commitment is for motor vehicle purchases (in this case including both new and used vehicles, trucks, motorcycles, etc). Of some concern is the high proportion of funds being used for debt consolidation and refinancing. This is a sign of financial difficulties on the part of those persons obtaining these loans. The funds used for this purpose have, since 1989/90, doubled.

Finally, it is possible to examine how the mix of personal debt instruments has changed between 1989 and 1992. The following table presents this information, that does not include loans made for housing. [PB]

Table 4: Personal Lending 1989-1992

Type	June 1989	June 1990	June 1991	June 1992
Credit Cards	12.4%	13.2%	15.2%	16.3%
Fixed Loans	65.7%	61.8%	65.8%	63.8%
Overdrafts	14.9%	17.9%	15.3%	15.9%
Other	7%	7.1%	3.7%	4%

The relative mix of loan types has been changing, with fixed loans and overdrafts has remained relatively static, a sustained rise in the proportion of credit card funds being loaned, and the decline (perhaps related) in other forms of funding over the period.

CONSUMER CREDIT

Consumer credit is defined as loans to individuals for private, non-business purposes, but excluding home investments. The roots of consumer credit can be traced to pawnbroking in the middle ages in Europe, credit being provided by lenders who took possession of goods as a security on the debt. High interest rates and an increasing number of pawnbrokers led to legislative controls, most likely related to the condemnation of charging interest and the punishment of usury as a sin (*Cavanagh 1988, 3*).

As market economies need growth to maintain increasing standards of living and peoples credit activities, companies realised at a very early stage that extending credit to ordinary consumers will increase the market for consumer durables and services and short-term consumption, especially if a move away from secured to unsecured loans is involved.

The greater part of western societies including Australia and North Queensland, are composed of people in the work force with sufficient income and assets who are seeking better standards of living, but are willing to adjust their standard of living from time to time, being encouraged by the ideal of a market economy giving everybody a fair chance to achieve a comfortable standard of living. They maintain that the support of unemployed persons and beneficiaries is necessary and reasonable, remaining convinced that the market economy has a built-in selfregulation and that economic growth and technical progress in the long term will improve future standards of living (*Fischer 1984, 96*). On the other hand sometimes they are victims of so called 'passive consumption'. This is the 'consumption' of goods such as video games, over-stretched using of television, dreaming of the next holidays, and solving personal loneliness and emotional emptiness with consumer goods and services and gambling on horse racing, roulette and cards. Recently Townsville College of TAFE (*Technical and Further Education*) has set up a course teaching people how to gamble (*Townsville Bulletin 27-09-93, 3*). These consumers are the major clientele of financial institutions in borrowing money for private consumption, often finding themselves in a so called 'debt tower', named after a prison used in the middle ages to make people pay their debt (*Reifner 1992, 29*). These debtors support an industry of solicitors, debt collection agencies, bayliffs and repossessors.

Opposed to this are the so called 'drop-out' groups, mistrusting the advantages and benefits that the so-called 'glamorous facade' of consumption within western societies provides, remaining unconvinced of the ultimate solution of the market economy for the sake of people. They distrust of politician's ability to solve social and economic problems, mostly relying on their own abilities and accusing governmental authorities of providing people with too much counselling in the form of so called 'common sense'. Most likely they are looking for a niche in which they can live, with an emotional, creative, independent and environmentally adjusted mode of behaviour enabling them to live simply without all the pressure of a 'must have' consumption-style. This does not mean that these people are neglecting some advantages offered by modern development, but adopt a quite different lifestyle which has often been labelled non-conformist. These people are likely to be suspicious about financing their private consumption with consumer credit, often having their own safety net enabling them to borrow money from their group. This group are not important clientele of financial institutions. However, surveys have indicated that they are aware and are examining in detail the conditions under which financial institutions provide consumer credit (*Fischer 1984, 97*).

The standard of living was formerly defined as GDP per capita and more recently measured by a 'basket' of social indicators including ownership of consumer goods and services, together with the provision of public goods and services like transport, education, health care, protection against violence and a stable environment. These should also be regarded as key factors in assessing the ability to borrow money for private consumption.

As a result of the development of banking and financial markets, a variety of different kinds of consumer credit are currently available to consumers. However, this has produced a tendency for financial institutions not to disclose the real costs of credit, as consumers in most cases not able to compare the price of various forms of consumer credit because of the highly sophisticated mathematical formulae required to do so. For instance, to calculate the real cost of revolving credit with variable interest rates can not be done without running a special computer program. This confers a significant advantage upon lenders, creating a powerful tool to gain profits from the lack of knowledge of borrowers.

The difficulty experienced by consumers in calculating the effective annual interest rate can be demonstrated by examining the general equations to calculate the effective annual credit rate in the *Standards Australia in 1990 for an Australian Standard of Interest Rate Description for Consumer Credit (see Appendix 2)*.

Consumers' knowledge of credit facilities is very limited, the first Australian national survey of literacy and numeracy (1989) showing

> 10% of Australians over the age 18 years could not accurately add two entries on a bank deposit slip;
>
> 30% of Australians in the age 25-34 years could not correctly write a cheque;
>
> 13.5% of managers could not add two items on a deposit slip, and
>
> 21% of professionals could not write cheques (Singh 1991, 20).

Nevertheless, the banking industry is arguing that this is the natural outcome of consumer demand. This issue has to be discussed later, as well as the problem of who bears the burden of bad debts. It appears that the owners of a financial institution bear the burden of bad debts, yet they receive interest payments that normally covers the risk of bankruptcy of the borrower. Logically, each private borrower should have interest rates, terms of repayments etc. set, individually reflecting that individual's risk. Losses are a fundamental part of a market economy and those who want to gain profit should be aware that losses are a sign of failure to correctly estimate the risk of a business.

The concept of the regulation of consumer credit requires both consumer protection through credit legislation and consumer information. The latter is more available in capital cities rather than in remote areas such as North Queensland. On a national scale there is a wider range of consumer advice centres, welfare organizations and legal aid services available. Notwithstanding the urgent need to extend these services to urban consumers, only a negligible personal advice on consumer credit can be obtained by consumers in remoter areas. Further, it should be taken into consideration that the so called 'cashless society', has become an integral part of rural societies in remote areas.

The 'cashless society' does not require that cash money has completely disappeared from circulation, or that all money transactions have been replaced by cashless transactions. It means that the use of cash money to pay for goods and services by consumers has been decreased considerably. Of course consumers still pay in cash using cheques, but the most important step to the so called 'cashless society' is related to the widespread use of 'plastic money'. Scenarios pointing out future trends in plastic money and the implications for consumers are based on the tremendous increase of using credit cards (*Roberts 1991, 7*).

The credit card system was introduced to Australia in 1974, representing an enormous push towards a cashless relationship between consumers and sellers. The development of an expanded 'cashless society' requires four diversified banking products:

1. *Automatic teller machines (ATM)*, which enable consumers with a plastic card and a personal identification number (PIN) to access cheque, savings, and credit card accounts; obtain cash money, transfer money among various accounts; and receive statements of their account balance.
2. *Electronic funds transfer at point of sale (EFTPOS)*, providing the opportunity to pay for purchases immediately with a plastic card and PIN in an expanding range of retail outlets across Australia.
3. *Home and office or phone banking*, making it possible for consumers to manage their accounts using a telephone and password 24 hours a day, 7 days a week.
4. *Prepaid payments cards*, which enable the cardholder to use public facilities which are designed to accept these cards rather than cash.

Automatic teller machines are growing in number across Australia in a wide network. It is estimated that by the year 2000 approximately 70% of retail transactions will be made through EFTPOS payments (*Roberts 1991, 7*). As long as money is transferred directly from a current saving or chequing account this form of payment is neutral to consumer indebtedness, however, if there is a link to overdraft facilities and credit card accounts then it will become a matter of consumer credit and political concern, as it may reduce the variety of payment methods available to consumers (*Mitchell 1992, 111*). In particular there has been concern expressed about elderly people having problems coping with electronic banking. Home and office banking seems to be not very popular but financial institutions are aggressively promoting this form of payment for salespeople, shift workers, elderly people, and people in remote areas. Prepaid payment cards, issued mainly by public authorities or telephone companies like Telecom Australia, gain an interest free loan from consumers windfall or if the cards are not completely used. A 'cashless society' means that transfer operations of numerous payments were shifted to the individual customer, and consequentially financial institutions have been able to reduce staff. As the cashless society grows, an increasing lack of personal relationships and problems between customers and bank officers will occur, in particular for elderly people who have problems adjusting to the anonymity caused by a growing number of invisible banking products.

Given that in the early 1990's approximately 4,000 ATM, and 10,500 EFTPOS terminals have been established, more than 300 different kinds of plastic cards were available (*Roberts 1991, 9*), and 10 million credit and charge cards were on issue in Australia (*ABA 1988, 13*), payment by cash money has become less and less attractive.

A recent advertisement by the *Australian Bankers' Association* praised how convenient the credit card is in the following manner:

> *'When you think a credit card which has a PIN can be used to access a debit card and transaction card at an ATM anywhere in Australia, you wonder how life was before plastic'*

In its submission to the parliamentary inquiry into the banking industry the Australian Bankers' Association provided the following figures, indicating access to banking service in 1990 (ABA 1990, 57):

> *over 95% of the adult population have a bank account, and of these:*
>
> > *50% have a statement savings account,*
> >
> > *50% have a personal cheque book,*
> >
> > *20% have a housing loan,*
> >
> > *40% have passbooks,*
> >
> > *70% use automatic teller machines,and*
> >
> > *60% have credit cards.*

Given the facts of the development and performance of consumer credit, and taking into account the ultimate need for consumer protection, then the provision of consumer protection through credit legislation is currently based on the idea that the individual borrower might ultimately seek resolution through court action. However:

> *'Access to the courts is based on the same egalitarian principles as access to the London Ritz – open to the rich and poor alike. In reality, it is a privilege few can afford. Research in the UK by the Office of Fair Trading (Annual Report, 1991) has revealed that only a tiny proportion of consumers with complaints pursue these as far as to a court or another dispute resolution procedure'* (*Gibson 1992, 407*).

It would be more effective to protect the average consumer in remote areas through credit legislation which provides essential and clearly defined regulations to avoid the necessity of individual borrowers seeking court resolution. Financial institutions should be made clearly aware that some imperative regulations restrict and modify their business behaviour in the marketplace.

In June 1990 a member of the Australian Defence Forces based in Townsville signed a contract with a Finance Company, for credit worth $10,014.51, and paid instalments until October 1992 totalling $9,389.83. Requesting a statement of the net balance, he was provided with a very simple statement with a pay off figure of $6,823.90 lacking any explanation of how this net balance was obtained. For this loan of 27 months the Finance Company charged this soldier an effective annual interest rate of 44.6%, which was not mentioned.

To illustrate the dimension of consumer credit a rough estimation about the size of consumer credit in North Queensland in 1988989 has been drawn. Out of 107,200 households there are 38,200 (35.63%) which have one, two, three or more personal loans. Average personal loan level per household with a loan commitment is $8,257.85, the interest per annum paid by each of these households being $1,527.48, and the weekly loan repayment made is over $100. Some 51.1% of all households had at least one credit card in 1988/1989, and 57.3% of persons with an annual income less than $8,000 had at least one credit. Given a personal annual income less than $8,000, the amount owing on the credit card account relative to the annual income is disturbing. Only 5.8% were owing 'nil', but 23.6% were owing more than $501, clearly showing the market penetration of credit cards.

Overcommitment of consumers in remote areas is not exceptionally great. Overcommitment has to be seen as exceeded credit of a household or an individual in the sense of having large consumer credits (instalments plus interests and other charges) relative to disposable income over a specific period, given a minimum standard of living. Given data showing that at least 1% of households in North Queensland are overcommitted, then at least 1,254 households with 4,101 persons were overcommitted in 1991. Further, data shows that 0.065% of the population, approximately 134 individuals, have declared a non-business bankruptcy in 1991. Bankruptcy declared by an individual as a non-business person is usually related in public opinion with a stigma of personal failure and inability to manage financial affairs. Those who have declared bankruptcy are often regarded as persons who try to escape easily from their obligation to serve their loans, often regarded as being un-Australian *(Roberts 1991, 85)*.

Although appearing to be common sense, upon closer examination, the matter becomes more vague. Not every bankruptcy can be described in such general terms, and if business companies can declare bankruptcy without such stigma, why should this not be possible for individuals in an economy which encourages consumers to borrow money for private consumption? *Roberts* has pointed out that bankruptcy is a quality of life decision for most people and usually occurs if the financial burden has become a severely detrimental effect on their life *(Roberts 1991, 89)*.

Investigations into the personal history of bankruptcy of households and individuals, examining the rise, the peak, and situation afterwards of the breakdown of financial status, are very rare. In his research study (1989) about people who had voluntarily declared themselves bankrupt, *Ryan* comes up with the following major findings. The bankrupt are usually between 30-35 years of age; living in a family situation and in rented accommodation; unemployed with an average annual income of $12,000 or less; owed an average amount of $11,000; had mostly consumer credit from finance companies; already possessed debts like unpaid rent, gas or electricity bills; and heavily pressured by creditors in the decision to go bankrupt *(Ryan 1989)*. The causes of bankruptcy are diverse, but unemployment and overcommitment seem to be highly correlated in the mind of the National Consumer Affairs Advisory Council *(NCAAC 1988a, 12)*.

When a breakdown in the financial status of households and individuals occurs, harassment and pressure from financial institutions through debt collectors over a long time might be involved and day-to-day life sometimes becomes a nightmare *(Roberts 1991, 91)*. There is a whole variety of potential actions debt collectors may use, such as on-going ringing at home or even at work, deliberately to contact the spouse of a married couple to cause distress in a relationship, to place 'funny' people with a sign like 'This borrower refuses to pay back their loan' (this happened in London years ago), asking neighbours about their financial situation, following them whilst shopping, or taking photos. In this whole process there are loopholes voiding the basic right of privacy of an individual by law and legal interest of debt collection agencies to seize goods or enforce repayments, a 'twilight zone' in which borrowers have to live in defending themselves or suffering under an umbrella of unexpected events.

Before breakdown really occurs, overcommitted consumers are already affected by seeking ways and means to raise income to repay their loans. The political concern as to what level of consumer credit is tolerable from a macro-economic point of view is not the only pertinent question, but focus should also be placed on the burden and the prevention of overcommitment of consumers. One possible contribution might be seen in consumer credit counselling.

Basically there are three major aims for consumer credit counselling:

1. *Consumer education*; to make students and people aware of borrowing money for private consumption in general and in particular the financial and legal conditions of taking a loan.
2. *Loan advice*; controlling the financial and legal conditions of a loan before consumers sign the contract to get a second opinion from an independent organisation.
3. *Debt counselling*; prevention of overcommitment if loans have been taken already, for instance debt consolidation, negotiating on behalf of an overcommitted consumer with financial institutions to reduce or stretch the burden of repayments and finally even to recommend to declare bankruptcy.

Within the OECD countries it is seen as common sense that consumer affairs authorities and consumer organisations play an important role in supplementing educational efforts to make students aware about the credit industry and of the financial and legal aspects involved with different kinds of consumer credit *(OECD 1992, 75)*. In most OECD countries Consumer Affairs is not a compulsory and independent subject in the curriculum of post-primary schools, often a part of home economics, law and business studies, partially in economics, and in Australia and Australian studies. Consumer education should commence in high school at the latest, and should be provided in tertiary, as well as in technical and further education (TAFE), courses *(CRAA 1991, 2)*. Recently the *Federal Bureau of Consumer Affairs*, Canberra, in co-operation with the *South Australian Department of Public and Consumer Affairs* issued a publication on credit and money management for use in schools *(OECD 1993, 54)*. The second aim is the provision of advice on a loan if consumers are willing to get a second and independent opinion before they sign the contract. This work might be done by official and non-profit agencies, assuming there are relevant funds for operation available for on-going periods. It would further be facilitated by a *Uniform Credit Legislation* Australia-wide with a standardized formula to calculate the effective annual rate of interest, plus a *Code of Banking Practice* including legislative requirements to the Trade Practices Act 1974. Minimum requirements of disclosures for consumer credit contracts and standardized methods for determining the effective annual interest rate are the subject of Consumer Credit Legislation.

The *Banking Ombudsman Scheme* commenced operation in Australia in July 1990, negotiated between the Australian Bankers' Association, the Commonwealth Government, and consumer groups. It is interesting that the Ombudsman's decision is binding for the financial institution but the consumer still has the opportunity to take legal action if he is not satisfied *(OECD 1993, 65)*. The Ombudsman is authorised to deal with consumer complaints which involve no more than $100,000 in direct financial loss, and where the financial institution has made an error or failed to do something it should have done *(Ombudsman 1993, 7)*. In addition the Ombudsman has to investigate:

> *'Whether the bank has allegedly breached the law, good banking practice or seemingly has not treated its customer fairly, or indeed, whether the customer really has cause for complaint' (Ombudsman 1993, 7)*.

This leads to the essential question of which law is in effect, what constitutes 'good banking practice', and who has set up such a code of conduct? Further, it is important that the Ombudsman is appointed by an independent Council which includes consumer representatives, but nevertheless there might be broader discussion about the significance of 'independence'. For instance in Norway the Consumer Ombudsman is likely to be an independent body due to the Scandinavian separation of powers, with the Norwegian Consumer Ombudsman representing a fourth power like the Ombudsman for other public matters. In its revised draft of the

Code of Banking Practice the Treasury and the Trade Practices Commission recommend under article 24.5 that:

> *'All institutions shall subscribe to an independent, external dispute resolution process, such as an Ombudsman scheme, to facilitate the prompt, fair and equitable resolution of disputes they themselves are unable to resolve with their Customers. Such dispute resolution processes shall be available free of charge to the Customer' (Treasury & Trade Practices Commission 1993).*

On the other hand it is a matter for action within the framework of self-regulation if business accepts the task of dispute resolution between business and consumers seriously, and regards dialogue as the path to responsible business conduct (*Braithwaite 1992, 5*). It seems to be a better overall solution if consumers as potential borrowers or as debtors can seek independent advice or representation and negotiation provided by the State Department of Consumer Affairs. Funded by public revenues, low and middle income consumers could get this service free of any charges, while higher income households should contribute a small fee. This actually happens in some OECD countries, for instance in Germany, if consumers are using the wide range of facilities of independent State Consumer Information Centres. Consumer groups claim justifiably that all States and Territories in Australia have inadequate numbers of credit counsellors. In most regions, in particular remote areas, they are non-existent.

Another contribution to weaken the burden of low income borrowers could be lending through a public body. *'We are, therefore, interested in the French Credit Municipal system which lends at below market rates in France and which has about 10% of the personal loans market, offering short and medium term loans. By satisfying the need for lower interest, small volume, short term loans, the extortionate lenders would, we hope, be forced out of business' (Simpson 1992, 152).*

Probably a large part of people still believe that a consumer (especially low income consumers) with consumer credits which exceeds many times the amount of a monthly salary, are unable to manage their life, their household budget, are living beyond their means, unable to act by rational purchasing decisions and are sometimes even accused of carelessness. This often implies that every consumer (except such people as those on alcohol, drugs, gambling or a tramp) is able to decide which needs should be satisfied and which ones can be afforded without resorting to consumer credit. In other words, excessive consumer credit is associated with a moral judgement of guilt, similar general attitudes being held by people with good position in society to beneficiaries of social security payments which they regard as 'dole bludgers'.

At last, the *Careforce Committee Longreach* presented in its report on a needs analysis survey on a selected region in Central Western Queensland *'Things are Crook in the Bush'* some interesting answer of the owner of rural properties with regard to their financial situation and their relation to banks (*Careforce 1993, 16-17*):

- We can survive if banks and agents get off our back. We are being penalised for destocking.
- (Banks) are only concerned with getting their money.
- We have been able to pay all bills by falling behind with payments to the Bank.
- People who go into debt and look for alternative employment seem to be penalised when it comes to receiving assistance.
- Cannot obtain "farmers dole" - assets make us non eligible.
- Debt level is almost at present property value (little equity) - all due to devastating interest rates.
- We have managed to pay off our debt when the wool prices were high, but have not amassed any savings and are about to reach the stage of requiring a loan/overdraft until the next wool cheque. If our income remains the same and prices rise, we will be put in this situation earlier each year.
- I believe we will have to sell out as the debt situation at the present moment is getting worse due to interest rates and low wool prices.
- We have used every resource from our family's funds to keep going.
- The very year we had planned to pay out our debt (the floor price fell) since then everything has been a nightmare. To maintain viability we have had to sell whatever assets to wait in hope for rain, a few good seasons to pull us out.
- Family may soon have to live apart to obtain off property work.
- All unnecessary expenditure curtailed.
- We cut costs as far as possible and live off savings to a certain decided point. If the prospects have not improved we will leave the industry.

CONCLUSIONS

Consequentially some recommendations which try to relieve, as far as possible, the problematic natures of consumer credit, and in particular in remote areas, will be presented (*Fischer & Massey 1994, 169-172*):

- The Code of Banking Practice (revised draft as of June 1993) should be enforced. This is clearly adjusted to average consumers, those with little knowledge about the conditions of a contract and financial commitments. The Code of Banking Practice should seek to greatly improve the relationship between financial institutions and their customers by establishing minimum standards of disclosure and conduct. According to the *Martin Committee's* recommendation the *Trade Practices Commission* should be the consumer protection agency for banking.
- Regarding the availability and disclosure of written terms and conditions and other documented information, such documentation should be expressed in plain English language. Whatever form 'plain English' or 'appropriate English' should take, there is no doubt that the current language used in financial contracts is probably hard to understand for the majority of average consumers, in particular using specific terms of a so called 'law language'.
- Financial institutions should have a duty of care under specific circumstances, this not simply being a matter of a contract (in accordance with Westpac Banking Corporation v. Spice).
- The use of one single mathematical formula, specifically the effective annual rate of interest in the form of a standardized comparison rate (proposed by *Standards Australia*) which includes virtually all costs related to credit, should be made mandatory for all financial institutions.
- In accordance with the Trade Practices Act, if the information about the comparison rate is not correct, it should be regarded as being deliberately misleading on the financial institutions part. The individual borrower should then have the option either to pay back the loan after a limited time when the false information was revealed without any interest charges for the period, or complete the conditions of the loan contract that was based on the misleading interest rate if this rate was lower than the correct one.
- The method of calculation of the pay-out figure must be standardized and with similar impositions to the comparison rate.
- A 'cooling-off period' of at least two weeks in which a potential borrower can cancel his application with no reason, has to become a regulation. In addition, financial institutions have to provide their individual customers with information about their right to cancel in 'plain' or 'appropriate' English, and in normal type matter. The consumer should be given essential information, expressed clearly and comprehensibly in good time to take full account of its implications before making a decision (OECD 1992, 57).
- A wider use of voluntary bankruptcy could be seen as the last resort of a debtor with few assets and an income just above the minimum level the Official Receiver will accept. Yet it might be a 'fresh start' even for people with some considerable assets

Voluntary bankruptcy for individual consumers should be promoted as an acceptable and legitimate avenue of debt resolution under certain circumstances.

- Traditionally bad debts were seen as losses which financial institutions bore as a part of their business, with share holders initially bearing the burden. It is now the case that the costs of bad debts are passed by cross-subsidy within the system of a financial institution to other consumers, even to those who have no loans and simply pay a fee for operating a savings account. This practice has to be abolished. The preferred method to do so is the adoption, by all financial organisations, of the calculation of interest rates based on the individual consumers' credit risk, rather than the imposition of a blanket rate.
- For low income consumers or beneficiaries who are the most vulnerable for consumer credit insurance, consideration should be given to whether the premium might be refunded to the consumer totally or partially by a government funding scheme, as a step forward in social policy to avoid a financial breakdown and hardship of these affected groups.
- It seems to be justified in social justice terms that the Queensland Government should provide some kind of financial help for overcommitted consumers. This might include the establishment of a government funding scheme which could not only cover bad debts of households up to a certain amount under restricted entitlements, but also provide, in specific cases, the possibility that the state government acts as a guarantor.
- In particular for remote areas, provision should be made for a network of consumer credit advice and debt counselling services. These services should be established to negotiate with lenders to discount a debt in the sense of reducing commitments to a manageable proportion or even establishing a moratorium which is adjusted to the foreseeable financial future, and finally to postpone debt collection. This should preferably be provided by the Queensland Department of Consumer Affairs. Under this scheme, both the regional offices at Townsville and Cairns would require one additional permanent staff member to cover an absolute minimum of consumer credit counselling in North Queensland.
- Credit legislation to protect consumers makes sense only if there is reasonable control over the conduct of business in the financial sector, provided by an independent authority. Therefore the *Consumer Affairs Council* in Queensland, as an independent body reporting to the *Minister for Emergency Services, Rural Communities and Consumer Affairs*, should be revived and commissioned with monitoring banking practices, including the right for media announcements.
- *The Uniform Consumer Credit Legislation – Consumer Credit (Queensland) Bill 1993*, should be enacted as soon as possible. The Bill is remarkably outstanding in some respects, in protecting the average, unskilled, and potentially overcommitted consumer. An example is the option for a variation on grounds of hardship and the involvement of State Consumer Agencies [Articles 66 (1) & 68 (1) & (2)]; and the provision that the Court may, in principle, re-open unjust transactions and re-open where the credit provider initially knows that the debtor cannot pay [Articles 71 & 72].
- *The European Declaration for Social Consumer Rights* should be used as the guide-line for further developments in the regulation of consumer credit in Queensland and Australia *(see Appendix 12, Fischer & Massey 1994)*.

APPENDIX 1

Queensland Government Department of Consumer Affairs Regional Office Townsville

Legislative Responsibilities (Non Religious) 1993

Associations Incorporation Act 1981
Auctioneers and Agents Act 1971
Bills of Sale and Other Instruments Act 1955
Boonah Showgrounds Act of 1914
Business Names Act 1962
Charitable Funds Act 1958
Classification of Films Act 1991
Classification of Publications 1991
Collections Act 1966
Contractors' Trust Account Act 1974
Credit Act 1987
Disposal of Uncollected Goods Act 1967
Factors Act 1892
Fair Trading Act 1989
Funeral Benefit Business Act 1982
Girl Guides Association Act 1970
Group Sales Act 1942
Hawkers Act 1984
Hire Purchase Act 1959
Invasion of Privacy Act 1971
*Justices Act 1886
Land (Fair Dealings) Act 1988
Land Sales Act 1984
Liens on Crops of Sugar Cane Act 1931
Mercantile Acts 1867
Mobile Homes Act 1989
Mortgage Brokers Act 1987
Motor Vehicles Securities Act 1986
Patriotic Funds Act Repeal Act 1988
Pawnbrokers Act 1984
Profiteering Prevention Act 1948
Pyramid Selling Schemes (Elimination) Act 1973
Registration of Births, Deaths and Marriages Act 1962
Registration of Deaths on War Service Act 1942
Rental Bond Act 1989
Residential Tenancies Act 1975
Retirement Villages Act 1988
Returned Servicemen's Badges Act 1956
Returned Services League of Australia (Queensland Branch) Act 1956
Sale of Goods Act 1896
Sale of Goods (Vienna Convention) Act 1986
Salvation Army (Queensland) Property Trust Act 1930
Save the Steam Car Fund Act 1985
Scout Association of Australia Queensland Branch Act 1975
Second-hand Dealers and Collectors Act 1984
Subcontractors' Charges Act 1974
Trade Coupons Act Repeal Act 1978
Trade Measurement Act 1990
Trade Measurement (Bread) Act 1990
Trade Measurement Administration Act 1990
Travel Agents Act 1988
United Grand Lodge of Ancient Free and Accepted Masons of Qld Trustees Act 1942
Warehousemen's Liens Act 1973

*Administered by Department of Justice and Attorney-General Queensland

Source: Information from the Department of Consumer Affairs Queensland, Townsville Regional Office.

APPENDIX 2

Draft of Standards Australia in 1990 for an Australian Standard of Interest Rate Description for Consumer Credit.

The general equations to calculate the effective annual credit rate are as follows:

$$\Sigma\Big[\;\rule{2cm}{0.4pt}\;\Big] = \Sigma\Big[\;\rule{2cm}{0.4pt}\;\Big] \tag{1}$$

$$i = (1 = r)^{n} - 1 \tag{2}$$

where

A_j = amount borrowed on the Jth payment period

I_j = contractual instalment payable on the Jth required payment period

C_j = charge payable on the Jth payment period

r = the effective rate of interest per payment period

n = number of required payment periods per annum

i = effective annual credit rate.

For ease of calculation, where the amount lent is provided in one payment at the date of settlement under the contract and there are no non-interest fees or charges payable after that date, then Equation (1) above can be expressed as:

$$Ao - Co = \Sigma\left[\;\rule{3em}{0.4pt}\;\right]$$

The charges (and fees) included in the effective annual credit rate calculation are those which are required by the lender, as a condition for granting the loan, to be paid by the borrower to that lender.

Some common examples of charges and fees payable to lenders, and therefore to be included in the calculation, are:

(a) application fees;

(b) periodic fees;

(c) membership fees;

(d) valuation fees;

(e) establishment fee;

(f) document fee; and

(g) commissions to lender's agent.

If desired, lenders may include other charges provided that supplementary information to this effect is disclosed in accordance with Clause 4.1.

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This totals greater than 100% as it is possible to be listed officially as unemployed and to be employed on a part time basis.

ISSUES AFFECTING RURAL COMMUNITIES FROM AN INDIGENOUS AUSTRALIAN'S PERSPECTIVE

Gracelyn Smallwood — Australia

ABSTRACT

Prior to the European invasion of Australia in 1788, indigenous Australians lived in harmony with themselves and their environment for over 60,000 years. Like all indigenous communities of the world who have been conquered, all have suffered:

a) loss of land
b) loss of culture
c) loss of identity
d) loss of self-esteem
e) institutionalisation
f) discrimination
g) isolation

The consequences of these factors have left a profound legacy of poverty, appalling standards of health and an almost total dependence on the largess or parsimony of Governments and their various bureaucratic arms. A recent delegation to Australia from the World Council of Churches, described conditions in remote Aboriginal communities as worse than fourth world.

Despite this tragic state of affairs we must all look for solutions that can lead to a healthy and independent future for our children.

There is no simple solution, but rather we must come to understand the interconnectiveness of all these issues, which impact on the socio-economic well-being of our people.

In other words, we need to ensure that all communities have access to the following:

a) clean running water
b) proper sanitation
c) adequate housing
d) accessible and affordable nutritional food
e) comprehensive community controlled health services
f) culturally relevant and appropriate educational facilities and curriculum
g) development of an economic base that will lead to increased self-esteem and prosperity for the whole commuity
h) reinforcement of traditional cultural values

Unless this is formulated and implemented we will continue to see further deterioration in indigenous communities.

Good morning Madam Chair, ladies and gentlemen. I would firstly like to give thanks to our indigenous elder Mr. Johnson, who welcomed us all at the conference opening.Secondly as an indigenous person, I wish to sincerely thank the conference organisers for giving me this opportunity to speak at this important gathering regarding issues effecting rural communities.

As this is an international conference, it is important that you all have an historical perspective of indigenous people before you can understand the present critical situation in our rural and isolated communities.

A quote from Jackie Huggins, an Aboriginal writer:

> "Aboriginal Australians have lived in Australia for over 40,000 years. It has been a long argued view of European Anthropologists and pre historians that modern humanity migrated south to Australia. This fails to explain, however, why older forms of modern human beings have not been found outside this continent. The legends and religious beliefs of modern Aboriginal Australia have no stories of migration. There is no evidence of migration memories anywhere in our country. This is a religious position taken by Aboriginal Australians, and science has failed to refute it."

Before 1788 Aboriginal Australians enjoyed a nomadic lifestyle and I stress the word NOMADIC. The word, the concept, suggests to the colonisers that we had no roots to our land, albeit a very romantic view.

All men, women and children lived in harmony with each other and the environment. Mother Earth was regarded as sacred, which everyone respected and did not exploit.

The healthy lifestyle changed dramatically when the invaders arrived from England, headed by Captain Cook. The land was claimed by the British law of "Terra Nullius" meaning unoccupied land.

The legal position remained until twelve months ago when the Mabo decision was handed down by the High Court recognising Native Title and on exposing the lie of "Terra Nullius". It has been estimated that approximately 1 million Aborigines inhabited the country when the invasion occurred, and over a period of 206 years we have declined to a population of 300,000 (2% of the national population).

The British killed thousands of Aborigines with guns, poisoned water holes, and many died from western introduced illnesses because they had no immunity to foreign diseases. From the point of contact introduced diseases spread throughout the country like wild fire.

In the 1800's Darwin's theory, the evolution of mankind, placed Aborigines at the bottom of the evolutionary scale. In effect we were introduced to the world as the missing link. Henceforth government policies were formulated and implemented on the fanciful and utterly ridiculous notion that we are sub human. We don't see ourselves as the missing link, rather what is missing is the commitment of governments and people within the Aboriginal industry to change the institutionalised racism that we deal with every minute of our lives!!!

Back to the 1800's, scientists around the world, particularly from Britain and Germany, encouraged the killing of Aborigines for scientific research. Monies were actually paid for skeletons and grave robbers descended upon the burial scene waiting for the mourning party to depart. Thousands of graves were robbed, the British and Australian scientists ran one of the biggest grave robbing networks in the world.

Studies by an academic researcher in Oxford indicated that the graves of between 5,000 and 10,000 Aborigines were desecrated. Their bodies dismembered to support this archaic science. Even more bizarre, is the irony that the gateway to Australia's north is called Darwin. Rather than the 1 million Aborigines living in Australia at the time of contact, it is now theorised that there were 3 million Aborigines in Australia.

Many surviving Aborigines were placed on reserves and missions, where they were controlled by white management under paternalistic legislation. The hunter/gatherer foods were replaced with high carbohydrate rations. Language and ceremonies were forbidden as it was seen as paganistic to the invaders superior Christian values.

Aboriginal men were drastically losing their role in society by being used as slave labour. The women were used as domestics and sexual partners for the white invaders, rapes and killings continued as a sport.

Quote by Rhys Jones a pre historian script writer:

> "One gorges at the Sunday afternoon manhunts of sexual mutilation, of burying live Aboriginal babies up to their necks in sand and kicking their heads off after trying the severed neck of the husband around the raped spouse".

Half caste children were being born and many sent away to welfare homes or to other reserves far away and many did not return.. It was estimated that one in every six Aboriginal children was taken away from their families this century, compared to the figure of one in 300 from the white community.

Like all indigenous communities of the world who have been conquered, all have suffered:

- loss of land
- loss of culture
- loss of identity
- loss of self-esteem
- institutionalisation
- discrimination and violation

The consequences of these factors have left a profound legacy of poverty, appalling standards of health and an almost total dependence on governments and their various bureaucratic arms.

In June 1993 the World Bank reported that, in general, health around the world was improving even in developing countries which are third world, white Australian health is also improving, however, indigenous Australian health is deteriorating and is now 4th world standards.

A recent delegation to Australia from the World Council of Churches described conditions in remote, isolated, indigenous communities as worse than fourth world. Last week, after the president of the Australian Medical Association visited isolated communities of Cape York, he stated that:

> "if these conditions were in the white community there would be a public outcry ...."

The average white Australian has absolutely no idea what it's like to live in a remote, isolated community, and the majority of people who live in these communities are indigenous.

If I am in a remote community and I have been diagnosed with breast cancer, or my child is sick, I have no choices of health care. However, if I live in the city, I could visit three different doctors. In a remote community for 6-8 months of the year I can be cut off from the rest of the world because of unsealed roads and unusable air strips at times even helicopter access is possible.

Let us now picture a scenario of an indigenous child being born, and growing up, in a remote North Queensland community, suffering extreme poverty, hopelessness, overcrowding, lack of clear running water, raw, untreated sewerage pouring into the land, seas and rivers, alcohol/drug misuse and family violence.

This child is likely to be received by the authorities as being "at risk" of abuse and neglect. However, this assessment must be examined in light of the environment in which this child could be reared.

Firstly the mother to be is often very young, in her teenage years. During her pregnancy she can be subjected to violence and abuse from her partner and has limited access to nutritional foods, as the cost of living in remote communities is astronomical. For example, a cabbage would cost around $12 and you and I pay $2 in the city.

In many remote communities the government stores are still purchasing second rate fruit and vegetables and selling to our people at 130% mark up.

If mum is "lucky", she may have ante-natal care twice during her pregnancy. At 33 weeks she will be sent away to a hospital in the nearest regional centre - Cairns or Townsville - where the child is born forfeiting his or her birth right. The mother usually survives the culturally inappropriate, white male midwifery service, gives birth to an under-nourished baby, born premature, away from her support system.

The mother then returns with her new born babe to a poverty stricken, isolated and remote community. If she is not encouraged to breast feed, she can pay up to $17 for a tin of milk formula which would cost $7.50 in the city. The social security pension cheque arrives once a fortnight.

On the off pension week, she will usually run out of money and to make the milk formula last the baby receives weaker and weaker milk. The solution is - mum herself eats less, usually carbohydrates and fat, rather than protein. Because of this "coping strategy" the baby's weight will be low and regarded by the authorities as "failing to thrive". As baby will be underweight for his age and undoubtedly suffering from lactose intolerance, infected with gut parasites, skin and chest infections, glue ear and possibly renal disease. If this child survives to the age of two, he will still be regarded as "failing to thrive" and then there is western welfare intervention......

A quote from an Aboriginal psychiatric nurse, Pat Swan's book "200 Years Unfinished Business".

> "For 200 years non-Aboriginal Australia has made many mistakes on our behalf, and there is no western model that can address the Aboriginal situation. Aboriginal people must be empowered by education and resources to control decisions affecting our lives, including mental health services. It is clear to Aboriginal people that those with unfinished business have low self-esteem and those with high self-esteem don't self-mutilate".

Research has shown that governments spend approximately $1,000 per white person in remote communities compared to $600 per indigenous person, and that many indigenous people in remote areas are working for the dole under CDEP.

Despite this tragic state of affairs, we must all look for solutions that can lead to a healthy and independent future for our children.

There is no simple solution, but rather we must come to understand the inter-connectiveness of all of these issues which impact on the socio-economic well being of our people.

In other words we need to ensure that all communities have access to the following:

(a) clean running water
(b) proper sanitation
(c) adequate housing
(d) acceptable and affordable nutritional food
(e) comprehensive community controlled health services
(f) culturally relevant and appropriate educational facilities and curriculum
(g) development of an economic base that will lead to increased self-esteem and prosperity for the whole community with meaningful employment
(h) reinforcement of traditional cultural values

Unless this is formulated and implemented we will continue to see further deterioration in indigenous communities.

In a quote from a TANU conference in Tanzania in 1971 stated:

> "Any action that gives people more control of their own affairs is an action for development, even if it does not offer them better health or more bread. Any action that reduces their say in determining their own affairs of running their own lives, is not development and retards them, even if the action brings them a little more bread".

In closing, the former Federal Minister of Health, Senator Graham Richardson, for the first time in his political career, visited the 4th world conditions of Aborigines in remote communities in his own country and cried and grandstanded to a national television audience by promising a double commitment of resources and monies to alleviate this deplorable conditions. His presence in one particular community was enough to put in one water tap.

He then returns to Canberra and within a few weeks he resigns, leaving the other political parties to debate in the highest levels of government the need for more resources and monies. The promises that he made were never delivered. The remote community that he visited received a tap. Graham Richardson received a life time pension.

Ladies and gentlemen, I put it to you that if governments want to be part of the solution, then God help indigenous people, if they are part of the problem.

WORKSHOP REPORTS

Thursday: Community and Economic Development

Group 1 - Sustainable Economic Development

1. The experience of practical and indigenous people should be incorporated in decision-making at higher levels.
2. New ways of communicating between regional people and policy makers should be expanded and developed.
3. Communities need help to respond to change.
4. Time should be allowed for local people to adapt to policy change.
5. Local Communities should be allowed more power in policy making.
6. Micro economic reform should be reviewed. Cost recovery has led to declining services. There is a need to take into account the full community cost of reducing services.
7. Awareness of urban people of the importance of rural communities should be increased.
8. "Community adjustment" policies and support are needed where industries have declined.

Group 2 - Social and Community Development

1. The barriers between government agencies should be broken down. Organisational structures need to respond to the real need for integration.
2. The role of local coordinators should be expanded.
3. Forums for coordinating discussions between local groups should be created.
4. Community leaders should be trained to know how they can be heard by policy makers.
5. Existing strengths in rural communities should be built upon by empowering existing groups to influence change.
6. Communities should be encouraged to develop procedures and protocols for consultation.
7. Governments need to develop clear protocols on consultation.
8. The issue of consultation should be put on the agenda for the interdepartmental Regional Managers forum (or equivalent).

Group 3 - Social Planning and Welfare Service Provision

1. Resources, education etc. need to be provided to assist with the facilitation of social movements such as self-help groups with support from a broad range of professional groups.
2. The development of negotiation skills is a vital aspect of assisting the local community to communicate with government and non-government departments.
3. A major research project needs to be funded to document the flow of resources into and out of rural and remote communities as one initiative within a regional/rural development strategy.
4. Locally-based childcare services are necessary to allow women in rural and remote areas to participate in employment or other activities.
5. Use of chemical technologies in rural production must take account of health and social issues. Women must be a part of the debate around the use of such chemicals.
6. Women in rural and remote areas need greater access to appropriate further education.
7. Inequitable gender relations in rural and remote areas must be publicly challenged to allow women to achieve positions of power in rural society.
8. Local government, producer representative bodies and other public organisations based in rural and remote areas should include women and focus on issues affecting rural women.

Group 4 - Rural Restructuring

1. The principles of the 'Kelty Report' (Australia) with regard to rural and remote areas development, recognising the centrality of both social and economic development are endorsed.
2. Regions should be empowered to establish a program to provide financial assistance for the support of rural and remote organisations for economic and social development.
3. These regional organisations should:
   (i) be responsible for regional strategic planning for economic and social development; and
   (ii) recognise the importance of the tertiary education sector to regional development, as catalysts for information, research and training.
5. Integrated service delivery should be developed at the regional level.
6. Governments should join with communities in the development of a strategy which assists in the economic and social development of agriculture, small business and other enterprises in rural and remote areas.

Group 5 - Sustaining Rural Communities

1. Rural land trust finance corporations should be established in order to repopulate rural communities to support their cultures and restore owner occupation.
2. Ways should be explored to link economic, social, cultural and environmental development.
3. Existing rural areas should be repopulated.
4. Ways to increase community participation in policy making should explored.
5. Community groups should invite government agencies to provide locally funded facilitators to achieve the solutions to locally identified community needs with local accountability.
6. Rural development finance should be ensured.
7. Government funding guidelines should be broadened.
8. Funding to support local needs should be provided in such a way as to be directly community controlled.

Group 6 - Consumer Affairs in Remote Areas

1. A code of banking practice should be enforced.
2. Disclosure of written terms should be in plain English.
3. Financial institutions should have a duty of care.
4. A wider use of voluntary bankruptcy should be encouraged.
5. In remote areas, there should be a network of consumer credit advice and debt counselling services.

Group 7 - Community Development: Indigenous Perspectives

This Workshop Report has been included in "Tuesday, Group 5"

PAPER PRESENTATIONS

CONTRIBUTION OF FSR IN INCREASING AGRICULTURAL PRODUCTIONS AND EMPLOYMENT GENERATION IN BANGLADESH

A. Halim, S.M.A. Hossain and A.B.M.M. Alam — Bangladesh

ABSTRACT

The farming systems and environmental studies were conducted in two different villages under two agro-ecological zones (AEZ) of Bangladesh. One village was Kazirshimla (district Mymensingh) characterized as medium highland above flood level under Old Brahmaputra Alluvial Floodplain AEZ; another village was Noagaon (district Kishoreganj) characterized as very lowland deeply flooded (1-5 m) for six months under Sylhet Basin AEZ. Technological interventions (total 32 at Kazirshimla and 34 at Noagaon) were made in farming households during seven years (1987-1993). Interventions were done by imparting informal education to the farmers through their participation in FSR, technology training, workshop, field days and motivation as well as encouraging schooling of children for formal education. Data were monitored in ten farms of each village on agricultural production, labour utilization, cost, income and dietary intake on yearly basis.

After seven years, diversification of farm enterprises with increase in production occurred in all farms. Farms with three enterprises (70% at Kazirshimla and 60% at Noagaon) were converted to five enterprises (90%) at Kazirshimla and four enterprises (90%) at Noagaon. At Kazirshimla, highest increase in investment (213%) was recorded in landless followed by small farms (162%) while at Noagaon landless and small farm investment increased equally by 232%. The increase in gross returns were recorded as 311% in landless and 185% in small farms at Kazirshimla while 281% in small and 259% in landless at Noagaon. The labour utilization was increased in general and also according to gender. The total labour utilization per year increased by 248, 234 and 201 mandays farm-1 in small, landless and medium farms, respectively at Kazirshimla while by 487, 354 and 184 mandays farm-1 in medium, small and landless, respectively, at Noagaon. In both villages, dietary intake also increased in same decreasing order of landless > small > medium farms as 746, 644 and 375 Kcal capita-1 day-1 at Kazirshimla and 724, 636 and 577 Kcal capita-1 day-1 at Noagaon. The increased energy intake helped to cross the poverty line of nutrition (2120 Kcal capita-1 day-1) especially by landless and small farms.

INTRODUCTION

Bangladesh is a densely populated South Asian developing country. Her economy is agrarian. But the rapid population growth surpassed the growth of agricultural production thereby making a threat to her economy. The research station-based technologies could not perform well in all spheres of agricultural production. This was due to incompatibility of these technologies in the varied farm environments crowded by small resource poor farmers unable to fulfil conditionalities for technological performance. Thus farming systems research was initiated in mid-eighties under the auspices of the Bangladesh Agricultural Research Council.

The National Network of Farming Systems Research included seven research institutes along with Bangladesh Agricultural University (BAU). But the very nature of multidisciplinary research team could not be constituted in all other research institutes except in BAU (BARC, 1989). From the beginning in 1985-86, BAU constituted a 18 member research team of professors and post-graduate scientists of several disciplines and started FSR in the two villages of two agro-ecological zones of Bangladesh (FSRDP, 1991). It began in the name of Farming Systems Research and Development Programme (FSRDP, 1987) whereafter it was renamed as Farming Systems and Environmental Studies (FSES) since 1992 with wider area and scope (Husain *et al.* 1992).

The present study was undertaken to assess the impact of FSES on the farming community of target area. The objectives of this study were to identify the change in enterprises, investment, income, labour utilization, energy intake and schooling of children in the farms of research area after eight years. The overall effectivity of FSR in the development of resource-poor farmers otherwise the rural poor were another aspect of the study.

METHODOLOGY

The study was conducted during 1985 to 1993 (eight years) in two sites (villages) of Farming Systems and Environmental Studies (FSES) of Bangladesh Agricultural University(BAU). The two villages were in two agro-ecological zones (AEZ) of Bangladesh.

One village is Kazirshimla under Trishal thana (lowest administrative unit) of Mymensingh district. It belongs to Old Brahmaputra Alluvial Floodplain AEZ and characterized by medium high land above normal flood level. Nearly every homestead of 200 households has pond and fruit, timber and fuel plants. Two to three crops are grown in a year where rice, wheat, potato, mustard, jute, pulses and vegetables were major crops. The farmers raise cattle, goat, chicken and ducks. The literacy rate of the village was 28% (FSRDP, 1987a).

Another village is Noagaon under Karimganj thana of kishoreganj district. It belongs to Sylhet Basin AEZ (*Haor* area) and characterized by very lowland which is deeply flooded (2-5 m) during June to October each year. The homestead area is very small and in a strip of land beside the river Dhenu with little vegetation. There is no pond in the village of 450 households. Crops are grown in one season during November to May. Boro (winter) rice, groundnut, potato, sweet potato, mustard, blackgram, and vegetables are major crops. The farmers raise cattle, goat, chicken and ducks. Fish catching throughout the year in *haor*, *beel*, canal and rivers and fish drying in winter is a major source of in come. The literacy rate of the village was 16% (FSRDP, 1987b).

Ten farms from each site were monitored. The farms studied covered four farm categories on the basis of farm size. The farm sizes were landless (upto 0.02 ha), small (0.21-1.20 ha), and medium (1.21-3.03 ha) at Kazirshimla (FSRDP, 1987a) while landless (upto 0.20 ha), small (0.21-1.00 ha), medium (1.01-3.00 ha) and large (above 3.00 ha) at Noagaon (FSRDP, 1987b).

The farms were monitored for crop, livestock, fisheries, agroforestry, homestead and off-farm productions, cost and income. In calculating costs and income local market prices were considered.

The farmers of both sites were conferred technological training and they participated in group or individual discussion for planning, trial and evaluation of technology trials They also participated in field days and discussion in the farmers workshop. All these are considered as informal education of the farmers aimed at increasing production and shown in the Table 1. The total number of componentwise technologies and total farmers participated in training are shown in the Table 2. The schooling of the farmers children were monitored for ages between 5 and 10 years before and after the initiation of FSES technological and motivational interventions.

Crops were monitored seasonally (four months) and livestock six-monthly while fisheries, homestead, agroforestry and off-farm activities were monitored annually.

The labour utilization was monitored activity wise on total labours (family plus hired) of each farm. In calculating annual labour 1.5 adult female and 2 children of ages between 8-17 were estimated as equal to one adult male labour (Hossain and Alam, 1992).

During one year, each farm was monitored for member wise dietary intake at three-day intervals by female workers interviewing the housewife (Islam et al 1991a &b). The quantity of each food item was then converted to nutritional and energy data using a standard nutrient table(HKI, 1989).

The income of the farmers was calculated by converting production data of crops, livestock, fisheries, agroforestry, homestead and off-farm activities into Taka and adding them for one year (Hossain & Alam,1992).

Data were analysed in simple statistical procedures and tables were prepared purposively to represent objectives of the study.

RESULTS AND DISCUSSION

Farm and Family sizes

The average homestead, pond and cultivated area as well as family size per farm of both FSES sites are presented in the table 3. It was revealed from the data that in both Kazirshimla and Noagaon sites, the homestead area and cultivated area per farm increased gradually as farm size increased from landless to large farms. Similarly , the lowest farm size was with landless while it was higher in small and medium farms (Table 3).

The family size on average was 7.5 in landless at Kazirshimla which reduced to 6.0 in medium farms. The biggest family size 8.0 was observed in large farms, the lowest of 6.0 in medium farms at Noagaon.

Enterprise combination for Farming System

The production enterprise of a farm or household was described combinedly. AT Kazirshimla, initially landless households had two to three enterprises which increased to five enterprises and even six in one household (Table 4A). Again, crop was an enterprise in two households before intervention while it was in all four households after intervention. Similarly, agroforestry was included as an enterprise in landless. Small farms were converted to five to six enterprises through intervention from two to three enterprises. Poultry and agroforestry were introduced in small farms. The medium farms also increased enterprises like goat and agroforestry (Table 4A).

At Noagaon, landless households acquired three to four enterprise system from two enterprises (Table 4B). Three enterprises of small farms were converted to five enterprises while three enterprises of medium farms also increased to four/five enterprises after FSES intervention. Large farm only acquired goat as an enterprise due to intervention (Table 4B).

In a general , 70% of three enterprise combined farming system (FS) of Kazirshimla were converted to 100% of five enterprise FS. Similarly, three enterprise FS (70%) at Noagaon were converted to 90% of four enterprise FS. Increased enterprises increased productions and thereby income also.

Cost and Income

The annual cost, gross and net incomes per farm and the benefit cost ratio are presented in the table 5. At Kazirshimla , the annual cost per farm were TK 27529,130990 and 178400 in landless, small and mediums, respectively,311%,194% and 185% of original respective annual income. The net annual income increased after FSES intervention by 668%, 225% and 199%, respectively, of original landless,small and medium farms net incomes (Table 5A). Before intervention at Kazirshimla ,the benefit cost ratios ranged from 2.31 to 2.66 which were converted to 3.04 to 4.12 after intervention. The landless households at Kazirshimla increased the annual cost or investment higher gross and net incomes as well as benefit cost ratio through FSES intervention. These were due to higher increase in productions of enterprises.

At Noagaon site, the annual costs were TK 940,6316,40623 and 60700,before intervention while Tk 2180, 14711, 50982 and 107950, respectively, after intervention in landless, small, medium and large farms (Table 5B) The percent increased in annual costs or investment were 232%, 233%, 125 and 178, respectively , in landless, small, medium and large farms, after intervention. Similarly, the annual gross incomes were Tk 17025, 50389, 120757 and 264360, respectively, in landless, small, medium and large farms after intention corresponding to 259%, 287% and 204% of original gross incomes (Table 5B). The increased net annual incomes were 264%, 318%, 131% and 227% of original net incomes, respectively, in landless, small, medium and large farms at Noagaon. The benefit cost ratios also increased after intervention (Table 5B). Both landless and small farms at Noagaon were more investors thereby increasing higher annual gross and net incomes.

Labour utilization

The total annual labour utilization including family and hired labourer on gender basis are presented in Table 6. In general, the total labour utilization increased in all farms of both the FSES sites of Kazirshimla and Noagaon by 125 to 244% and 126 to 352%. At Kazirshimla, the highest increase in male (357%), female (191%) and child (300%) labour after interventions were recorded in landless, small and medium farms (Table 6A). While at Noagaon, the highest increase in male (306%), female (218%) and child (213%) were recorded in landless, medium and small farms, respectively (Table 6B). However, the total increase in labour utilization was higher in landless households both at Kazirshimla (244%) and Noagaon (352%) after FSES intervention. This agrees well with the landless groups' higher percent investment and higher gross and net incomes after FSES intervention in both sites. This indicates the that the landless groups posses the higher employment generation capacity than the others.

Energy intake and food source

The per capita per day food intake converted to energy as well as the proportion of food source from plant and animal are shown in the table 7. The data revealed that per capita energy intake per day, before and after FSES intervention, followed the same pattern of large>medium>small>landless. The per capita energy per day were 2684, 1747 and 1540 at Kazirshimla and 2137, 1924, 1873 and 1414 K cal at Noagaon, respectively, before intervention, while 3059, 2391 and 2286; and 2778, 2508, 2500 and 2138 K cal, after intervention (Table 7).

The sources of plant food were more before intervention which slightly decreased after intervention in both the sites. The trend after intervention in proportion of animal food was medium>small>landless (8%, 7% and 5%) at Kazirshimla (Table 7A) while landless>small>medium>large (12%, 7%, 6%, 6%) at Noagaon (Table 7B). This was due to abundant fish at Noagaon caught and consumed higher by the landless and small farms (FSRDP, 1988).

Schooling of children

The per cent school-going children before and after FSES intervention are presented in the table 8. It was found that before intervention, the per cent school-going children ranged from 40-65% at Kazirshimla while 20-55% at Noagaon in various farms. After FSES intervention, the per cent school-going children increased by 80-100% at Kazirshimla (Table 8A) while 70-95% at Noagaon (Table 8B). However the total per cent school-going children increased from 54% to 92% at Kazirshimla while 38% to 78% at Noagaon site.

This increase was partially due to motivation, increased incomes and social status upliftment among the studied farms. The school-going children also participated in agricultural activities besides their studying.

CONCLUSION

The impact of informal education through technology training, field day, workshop and participation of farmers in planning, execution and evaluation of farming systems trials were evident in more farms of both the sites of Bangladesh. But due to financial, personnel and time constraints all of those were not monitored. Again, the housing, farm size, pond excavation and other changes occurred in the studies farms (Hossain and Alam 1992) are not mentioned.

However, the impact of farming systems research would inspire the scientists, planners, development workers and extensionists to relock into the rural development issues afresh. The donors, development agencies/institutes and academicians should rethink about this.

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Table 1. Informal education conferred to the farmers of two FSES sites through various means in Bangladesh

Source of informal education	*Kazirshimla*		*Noagaon*	
	No. of days	Participating farmers (%)	No. of days	Participating farmers (%)
1. Technological training	12	62	10	65
2. Individual/group discussion	48	84	41	79
3. Research trials	-	80	-	73
4. Evaluation	24	35	22	42
5. Field day	2	58	2	52
6. Farmers' workshop	2	28	2	24

Table 2. Training on agricultural technologies offered to the farmers of two FSES sites (villages) in Bangladesh

Component of technology	Total technology No	Farmers trained(%)		
		Male	Female	Total
A. Kazirshimla (Mymensingh)- Medium highland				
1. Crop	12	46	6	52
2. Livestock	6	26	15	41
3. Fisheries	4	30	6	36
4. Agroforestry	2	16	12	28
5. Homestead	5	4	35	39
6. Off-farm	3	5	15	20
B. Noagaon (Kishoreganj)- Very lowland				
1. Crop	14	42	8	50
2. Livestock	6	28	16	44
3. Fisheries	5	29	19	48
4. Agroforestry	4	14	8	22
5. Homestead	2	2	24	26
6. Off-farm	4	7	25	32

Table 3. Average farm size and family size of studied farms in two FSES sites of Bangladesh

Farm category	Farm size (ha)				Family size (No)		
	Homestead area	Pond area	Cultivated area	Total	Male	Female	Total
A. Kazirshimla (Mymensingh) - Medium highland							
Landless	0.04	0.02	0.06	0.12	2.3	5.2	7.5
Small	0.07	0.04	0.57	0.68	4.5	2.0	6.5
Medium	0.09	0.39	1.35	1.83	3.5	2.5	6.0
B. Noagaon (Kishoreganj) - Very lowland							
Landless	0.04	–	0.12	0.16	3.5	3.0	6.5
Small	0.05	–	0.69	0.74	3.6	3.6	7.2
Medium	0.06	–	1.67	1.73	3.0	3.0	6.0
Large	0.14	–	5.37	5.51	4.0	4.0	8.0

Table 4. Enterprises of farming systems under studied farms in Bangladesh

Farm category	Before intervention	After FSES intervention
A. Kazirshimla (Mymensingh) - Medium highland		
Landless	Crop-Cattle-Poultry	Crop-Cattle-Goat-Poultry-Agroforestry-Off-farm activities
Landless	Crop-Cattle-Poultry	Crop-Goat-Poultry-Fish-Agroforestry
Landless	Poultry-Fish	Crop-Cattle-Poultry-Fish-Agroforestry
Landless	Crop-Goat-Poultry	Crop-Cattle-Goat-Poultry-Agroforestry
Small	Crop-Poultry	Crop-Cattle-Poultry-Agroforestry
Small	Crop-Cattle-Poultry	Crop-Cattle-Poultry-Fish-Agroforestry
Small	Crop-Cattle-Goat	Crop-Cattle-Goat-Poultry-Fish
Small	Crop-Cattle-Fish	Crop-Cattle-Goat-Poultry-Fish-Agroforesty
Medium	Crop-Cattle-Fish	Crop-Cattle-Poultry-Fish-Agroforesty
Medium	Crop-Cattle-Poultry-Fish	Crop-Cattle-Goat-Poultry-Fish-Agroforesty
B. Noagaon (Kishoreganj) - Very lowland		
Landless	Poultry-Capture fishery	Crop-Goat-Poultry-Captured fishery
Landless	Crop-Poultry	Crop-Poultry-Captured fishery
Small	Crop-Poultry-Capture fishery	Crop-Cattle-Poultry-Captured fishery
Small	Crop-Poultry-Capture fishery	Crop-Cattle-Goat-Poultry-Captured fishery
Small	Crop-Cattle-Capture fishery	Crop-Cattle-Goat-Poultry-Captured fishery
Small	Crop-Poultry-Capture fishery	Crop-Goat-Poultry-Captured fishery
Medium	Crop-Poultry-Capture fishery	Crop-Goat-Poultry-Captured fishery
Medium	Crop-Poultry-Capture fishery	Crop-Cattle-Goat-Poultry-Captured fishery
Medium	Crop-Cattle-Poultry	Crop-Cattle-Poultry-Captured fishery
Large	Crop-Cattle-Poultry-Captured fishery	Crop-Cattle-Goat-Poultry-Captured fishery

Table 5. Change in cost, income and benefit cost ratio in studied farms of Bangladesh (Taka farm-1 year-1)

Farm Category	Before FSES intervention				After FSES intervention			
	Cost	Gross income	Net income	Benefit cost ratio	Total cost	Gross income	Net income	Benefit cost ratio
A Kazirshimla (Mymensingh) - Medium highland								
Landless	3827 (100)	8858 (100)	5031 (100)	2.31	8160 (213)	9369 (311)	33623 (668)	4.12
Small	25873 (100)	67392 (100)	41519 (100)	2.60	37585 (145)	130990 (194)	93405 (225)	3.48
Medium	36095 (100)	96175 (100)	60080 (100)	2.66	58717 (162)	178400 (185)	119683 (199)	3.04
B Noagaon (Kishoreganj) - Very lowland								
Landless	940 (100)	6565 (100)	5625 (100)	6.98	2180 (232)	17025 (259)	14845 (264)	7.80
Small	6316 (100)	17545 (100)	11229 (100)	2.77	14711 (233)	50389 (287)	35678 (318)	3.43
Medium	40623 (100)	94445 (100)	53822 (100)	2.32	50982 (125)	120757 (128)	69775 (131)	2.37
Large	60700 (100)	129480 (100)	68780 (100)	2.13	107950 (178)	264360 (204)	156410 (227)	2.45

Figures in the parentheses indicate per cent. Source: Hossain and Alam, 1992

Table 6. Labour utilization on gender basis in the studied farms of Bangladesh (Manday year-1 farm-1)

Farm Category	Before FSES intervention				After FSES intervention			
	Male	Female	Child	Total	Male	Female	Child	Total
A. Kazirshimla (Mymensingh) - Medium highland								
Landless	59 (100)	80 (100)	23 (100)	162 (100)	212 (359)	116 (145)	67 (291)	395 (244)
Small	388 (100)	119 (100)	60 (100)	567 (100)	482 (124)	227 (191)	90 (150)	799 (141)
Medium	548 (100)	178 (100)	80 (100)	806 (100)	539 (98)	233 (131)	241 (300)	1013 (125)
B Noagaon (Kishoreganj) - Very lowland								
Landless	30 (100)	43 (100)	-	73 (100)	92 (306)	85 (197)	80	257 (352)
Small	281 (100)	68 (100)	3 (100)	352 (100)	454 (161)	115 (169)	64 (213)	633 (180)
Medium	837 (100)	80 (100)	82 (100)	999 (100)	1193 (142)	175 (218)	116 (141)	1484 (148)
Large	934 (100)	158 (100)	90 (100)	1182 (100)	1139 (122)	191 (121)	145 (161)	1495 (126)

Figures in the parentheses indicate percent; Source: Hossain and Alam, 1992

Table 7. Change in per capita energy intake per day and food source in the studied farms in Bangladesh

Farm Category	Before FSES intervention			After FSES intervention		
	Energy (K cal)	Plant food (%)	Animal food (%)	Energy (K cal)	Plant food (%)	Animal food (%)
A. Kazirshimla (Mymensingh) - Medium highland						
Landless	1540	98	2	2286	95	5
Small	1747	97	3	2391	93	7
Medium	2684	96	4	3059	92	8
B. Noagaon (Kishoreganj) - Very lowland						
Landless	1414	94	6	3059	88	12
Small	1873	95	5	2138	93	7
Medium	1924	96	4	2508	94	6
Large	2137	97	3	2878	94	6

Source: Hossain and Alam, 1992; Islam et al. 1991a&b

Table 8. Change in percentage of school-going children (5-10 years) in the studied farms in Bangladesh

FARM CATEGORY							
Before FSES intervention				After FSES intervention			
Landless	Small	Medium	All	Landless	Small	Medium	All
A. Kazirshimla (Mymensingh) - Medium highland							
40	50	65	54	80	90	100	92
B. Noagaon (Kishoreganj) - Very lowland							
20	40	55	38	70	80	95	78

A NORTHERN TERRITORY APPROACH TO QUANTIFYING "ACCESS DISADVANTAGE" TO EDUCATIONAL SERVICES IN REMOTE AND RURAL AUSTRALIA

D A Griffith — Australia

This paper describes a new model, the Griffith Service Access Frame (GSAF), for quantifying the access disadvantage of remote and rural populations to educational services.

The model can be used at the national, state or regional level in any country that has reliable census data. The model was developed specifically to assist policy-makers and administrators to allocate resources in a way that would overcome or minimise access disadvantage. This is a necessary condition in social justice and equity programs where resources are allocated on the basis of the relative need of specific target groups.

A model used to allocate social justice resources should allow policy makers to determine the level of eligibility at which extra resources should be provided. A model should also be transparent enough to allow target groups to verify that their allocation is equitable, have face validity and be based on accepted data and research techniques.

THE EXISTING MODEL

The current formula used by the Australian Federal Government (the Commonwealth) to allocate resources to those States and Territories whose population suffer from an access disadvantage to educational services are in urgent need of review as they do not effectively allocate resources on the basis of relative need and lack perceptual validity. The Commonwealth's Department of Employment, Education and Training administers a program, the Country Areas Program, that specifically targets students who have limited access to social, cultural and educational services due to geographical isolation. This program has been the vehicle for addressing the educational access disadvantage of Australian students in rural and remote areas for the last twelve years.

The access to services approach is based on the assumption that people in rural and remote areas are entitled to the same quality of education as those in urban centres. It is sometimes argued that rural and remote students require a different kind of education more suited to their lifestyles. Similar arguments could be made for teaching indigenous peoples. A problem with this argument is that it tends to suggest that a special kind of education should be provided that is different from urban, mainstream education delivery. However, a certain level and commonality of knowledge is demanded for entry into tertiary education. The requirement for a level of education that allows access to urban life opportunities and access to the highest levels of tertiary education supports an argument for educational portability. Education provision to rural and remote communities must equate with urban levels and standards to allow portability.

The current Country Areas Program formula allocates funding to States and Territories on the basis of distance and population centre size. However, the way these two elements are used within the formula together with the ongoing reliance on outdated 1976 census data, causes significant distortion in the allocation of resources. In the population centre size element of the formula, population in centres of less than 5 000 and greater than or equal to 1 000 are given a weighting of one whilst populations in centres of less than 1 000 are given a weighting of two. The location of the population centre is not taken into account. This results in all population centres of less than 5 000 being made eligible for funding even if they are in close proximity to a large urban centre or city. The result of there being no restriction on the location of 1 000 and 5 000 population centres is that it gives a heavy weighting to densely populated areas that are not necessarily geographically isolated.

In the distance element, population centres of 10 000 are used as the population service centre from which distances of 100 km and 150 km are calculated.The population beyond 100 kms are given a weighting of one whilst those over 150 kms are given a weighting of two. There is no further weighting for distances beyond 151 kms. This results in a person 151 kms from a 10 000 population centre being treated exactly the same as a person 650 kms distant. The distance element, by setting a maximum threshold of 151 kms, effectively determines that the degree of access disadvantage is the same for all persons living beyond that distance. This limitation significantly understates the access disadvantage of populations living in remote areas.

The major problems with the current formula are that both elements favour the most densely populated areas of Australia rather than those that are geographically isolated and have the greatest access disadvantage. Further the population centre thresholds of 10 000, 5 000 and 1 000 used in the formula are arbitrary and not research based.

The distance thresholds of 100 kms and 150 kms are also arbitrary, as are the weightings for both elements. The result of using a population density approach of this kind is that the most densely populated areas secure a higher proportion of funding than one would expect in a program targeting access disadvantage.

The Country Areas Program specifically identifies students with limited access to services as its target group. Therefore, this program needs a model that quantifies relative access to educational services to ensure that funding is allocated on the basis of a student's relative degree of access disadvantage. The Griffith Service Access Frame (GSAF) was developed for this purpose.

THE NEW MODEL

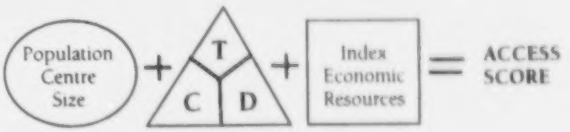
The GSAF model provides a methodology for the measurement of access to a range of services, or a specific service, for all locations in Australia. It does not attempt to define boundaries between urban, rural or remote areas.

Like many other approaches used to construct indices of isolation or remoteness, the model incorporates distance and size of population centre but also an additional element derived from the Australian Bureau of Statistics Index of Economic Resources.

The model is based on three underlying assumptions.

1. There is a direct relationship between the level of service available and population centre size;
2. Access to services is dependent upon the distance between the location of the client population and point of service; and
3. Access to services is dependent upon the economic capacity of the community to meet the costs of overcoming distance.

DIAGRAMMATIC REPRESENTATION OF THE GSAF



Elements of the Griffith Service Access Frame

Key

○	Size	Census Population of Centre
△	Time/Cost/Distance	Time or cost capable of being converted into distance equivalent
□	IER	Index of Economic Resources: An Australian Bureau of Statistics composite measure available at Collectors District level

An access score is calculated for each population centre in the following way:

1. A service or basket of services is determined and the location from which they can be accessed (service access centres) is identified. Alternatively a surrogate population centre threshold can be used (this is less accurate) if it is known that the level of service is normally provided.
2. A score is then generated for each of the three elements for each population centre accessing services from the identified service access centres.
3. Principal Component Analysis is undertaken to relate each centre to every other centre in the model to generate the relative weights of the elements in the model. Principal Component Analysis (PCA) was chosen after investigating a number of multivariate statistical analysis methods. PCA was deployed to develop a linear relationship among the three chosen factors, population centre size, time/cost/distance and economic resources based on the variances within each factor and the correlation matrix of variables. PCA is a well established method used to synthesise a range of variables and is common in statistical computing packages.
4. Element scores are generated for each population centre seeking services.
5. The weighted sum of element scores is calculated to derive a service access score for each population centre.

It is essential that the user must clearly define, in a quantative sense, the service or group of services to which access is required. As with any model of this type, the validity of the result depends upon the data fed into the model. Therefore, selection of the service access centre is a crucial step in the functioning of the model.

HOW THE GSAF WORKS

The GSAF is a three dimensional model which uses data from the Australian Bureau of Statistics' smallest unit of population analysis, the Census Collection District. In urban areas Collection Districts average about 300 dwellings, whilst in rural areas the number of dwellings in Collection Districts is less (as population density decreases). The use of Collection Districts allows detailed analysis of population and geographical areas. In the GSAF model each population centre is given an individual Service Access score generated across the three elements of the model.

THE THREE ELEMENTS OF THE SERVICE ACCESS FRAME

The Service Access Scores are developed using the three elements of the model that, when combined, produced a score that quantifies the relative access of the population centre.

1. **Population Centre Size** is the first leg of the frame. Size is a well established indicator of the range of services available within a population centre. The validity of using population centre size as an indicator of service provision in Australia

has been established by research in Tasmania (Scott 1964), South Australia (Smailes 1969) and Queensland (Dick 1971). Population centres in the GSAF are ranked through 10 size classification from over 500 000 to below 200 based on the actual clustering of population centres by size in Australia. Population centre size is a reliable indicator of the level of service provision, therefore, the larger the centre is, the lower the element score it generates.

2. **Time/Cost/Distance** Units allow the relative time, cost and distance from the service centre to be calculated for each population centre. Time, cost and distance have significant influence on access (Morrell 1974, and Vickerman 1980). The time/cost/distance unit incorporates three sub-elements. The average distance travelled by the average motor vehicle on all types of road surfaces in Australia is 75 kilometres in one hour. These two factors provide the basis for the distance and time sub-elements. The cost of the traveller's time (calculated by using an hourly rate of pay based on the national modal wage) together with the standing and running costs of the motor vehicle for one hour comprise the cost sub-element.

   These sub-elements are combined into the time/cost/distance unit. Air travel can also be built into the unit by dividing the air fare by the cost value of the sub-element to get the quotient which is then multiplied by the average speed per hour to convert the fare into a kilometre equivalent.

   The time/cost/distance unit gives its three factors an equivalent value enabling the calculation of the relative access. Both time and cost can be translated into a distance equivalent. There are 30 time/cost/distance rankings required to determine the relative access of the remotest population centres in Australia.

3. **The Economic Resources** available to a population centre is an important factor in calculating access to services. A population centre's economic resources score is derived from, the Australian Bureau of Statistic's Index of Economic Resources (ABS 1993), which in turn is derived from 1991 census data.

   The Economic Resources Index identifies the level of economic resources within a population centre. This index provides the means of calculating the economic capacity of population centre to overcome the cost of travel relative to all other localities in Australia. There are 10 rankings in the economic resources element from 1 000, which is the Australian mean score and above which there is no disadvantage, to less than 550. Less than 550 is a very low score only occurring in Aboriginal communities.

COMBINING THE ELEMENTS

The three component elements of the Service Access Frame are combined to provide an access score for each population centre in Australia relative to a level of service provision. The Service Access Score is derived by using Principal Component Analysis (as described above) to combine the three element scores. The access profile provides a simple exposition of the impact that each of the three elements have upon a population centre's access to services. The combination of the three elements allows a more precise profile of access to be constructed.

APPLICATION OF THE MODEL

A trial analysis conducted for the Country Areas Program in Queensland in 1992 demonstrated the face validity of the model based on a service access centre population of 10 000. Further analysis of service access centres of 50 000 and 25 000 were conducted. However, due to the lack of a clear definition of the services to be accessed and limited information being provided on school community profiles, there were some minor anomalies in the access rankings which became apparent when tested against local knowledge. These anomalies served to emphasise that care needs to be taken in selecting the service access centres to which accessibility is to be measured.

The model was first adopted by the Northern Territory Department of Education for the distribution of funding in the Country Areas Program within the Territory in 1993. This resulted in a significant redistribution of funding to the remotest areas.

Straight line distance was used in the 1993 model due to a lack of the information required to calculate the actual road distance into the distance element. The impact of the time/cost/distance unit in some areas in Arnhem Land and on the islands was therefore less than it should have been. However, even when straight line distance was used, the most remote areas of the Northern Territory received up to 24 percent more funding than under the national formula when applied to intra-Territory distributions. Informed comment from regional administrators and teachers suggest a greater satisfaction with the new model as it reflects the perceived access disadvantage of these school populations.

In 1994 the GSAF was further refined by using data which had just become available from the ABS 1991 Census and by using actual (rather than straight-line) distances to service access centres and incorporates differential weightings for sealed and unsealed roads. Incorporated for the first time were the time and cost sub-elements which allow population centres without road access or on islands to be accurately scored on a comparative basis with centres that have road access by converting the cost of air fares into a distance equivalent as previously described above.

A survey of education staff who have detailed knowledge of the schools and regions throughout the Northern Territory has been undertaken to test if the GSAF reflects to a statistically significant degree people's perceptions of the remoteness or access disadvantage of schools in the Northern Territory. The questionnaire asked them to rank schools in their region on the basis of their access to Darwin or Alice Springs, the two Territory centres with populations over 20 000 (see Map), taking into account actual distance, travel time and cost incurred.

SURVEY RESULTS

The objective of this survey was to test whether or not the GSAF remoteness component matched accurately people's perceptions of the time, cost and distance it took to get to a particular school and conversely for the particular school community to access the service access centre.

Of the 60 questionnaires sent out to those people with the knowledge and experience to complete them, 49 questionnaires were returned. This was a response rate of 82%.

SURVEY METHODOLOGY

Step 1

The first step taken in the analysis of the survey results was to determine the extent of the statistical correlation between the incoming questionnaires and the results generated by the GSAF. Because the data contained in the survey was of an ordinal nature, ie, ranked data, the Spearman's Rho test statistic was used to test for correlation between the GSAF results and each individual questionniare.

The Spearman's Rho test was conducted at the 0.05 level of significance testing these hypotheses;

Ho: There is no correlation between Xi and Yi

Ha: Either (a) there is a tendency for larger values of X to be paired with larger values of Y, or (b) there is a tendency for the smaller values of X to be paired with the larger values of Y.

Step 2

The second step of the analysis was to determine the overall correlation between a group of questionnaires from a particular region with the results generated by the GSAF.

In order to combine the rankings of individual questionnaire into one small ranking, principal component analysis was used. The specifications of this analysis were standardised unit variance and selecting only the first principal component.

After one combined ranking had been obtained Spearman's Rho was again used to test the correlation between the grouped questionnaires and the GSAF.

This analysis was conducted for each of the six education regions within the Northern Territory.

Survey Results

Individual surveys

In all but 3 (of the 49) individual surveys one could reject the null hypothesis (Ho), that is, that there was no correlation between the GSAF and the survey results.

Regional Grouped surveys

In all 6 regions one could reject the null hypothesis that there was no correlation between the grouped surveys and the GSAF.

This indicates that there is substantial agreement between the perceptions of remoteness of schools as surveyed, and the method for ranking schools for remoteness, used by the GSAF.

CONCLUSION

One can therefore conclude that the GSAF reflects to a statistically significant degree people's perceptions of the remoteness of a school in every region surveyed. The GSAF is therefore a valid method to use when independently determining remoteness of schools within the Northern Territory.

The Northern Territory Department of Education has expressed confidence in the GSAF. The Department has adopted the model for allocating Country Areas Program funding and giving an access dimension to the distribution of Special Education and Professional Development funding in 1994. It is now under consideration for the English as a Second Language program.

The Commonwealth (Federal) Department of Employment, Education and Training is currently considering the GSAF as one of the options for the national allocation of funds in the Country Areas Program.

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RURAL COMMUNITIES IN QUEENSLAND: FUTURE CHALLENGES

Julie Ling — Australia

ABSTRACT

The paper outlines the great diversity and common characteristics of rural communities in Queensland. The contribution of rural Queensland is highlighted and related to the broader canvass of the national and international agenda of issues. As well the context of change underway in rural Queensland is discussed. The paper reviews research findings from other jurisdictions and identifies a number of changing links in rural communities between towns and their surrounding districts and relates these findings to Queensland rural communities. It also explores the vital interelationship between public and private sector activity in the rural Queensland context and reflects on the important dynamics of leadership and partnership. In conclusion the paper identifies a number of challenges ahead for both the public and private sector to consider regarding their involvement in rural communities.

DEFINING RURAL QUEENSLAND

There are various definitions of 'rural'. Most Queenslanders would say that provincial cities such as Toowoomba and Rockhampton are essentially rural, that certainly regional centres such as Roma, Longreach and Emerald are; as are service towns like Goondiwindi and Charleville, and smaller towns like Cunnamulla or Blackall and very small towns like Birdsville, Jundah, Alpha and Thallon.

The Australian Bureau of Statistics (ABS) defines rural areas in terms of density of population and relationship of low density collection districts (CDs) to adjacent urban areas. It excludes many rural towns from its definition of rural. These are defined as "other urban".

Commonwealth Departments have been classifying areas as metropolitan, rural or remote based on population size. Each State is divided into metropolitan, rural and remote zones. Under this definition, most of the coastal regions of Queensland as far north as Cairns are classified "rural". Areas west of the Great Divide and north of Cairns are regarded as remote. Brisbane, the Gold and Sunshine Coasts are considered metropolitan.

The Queensland Government adopts a working definition of rural Queensland which encompasses all ABS Statistical Divisions (SDs) outside Brisbane and parts of Moreton. It does not draw a distinction between rural and remote as does the Commonwealth Government. However, it is broadly consistent with the Commonwealth approach by excluding both the Brisbane and Moreton SDs which are classified as "metropolitan". Unlike the ABS, Queensland and the Commonwealth do not exclude rural towns and provincial centres from the definition of rural, as they regard them as interdependent with their rural hinterlands.

In summary this paper acknowledges a continuum of the concept 'rural' and of the definition of 'rural community' which can vary in terms of size, from substantial provincial cities to very small townships. The issue seems more one of determining the most appropriate definition for the particular context under consideration and clearly this is best done in consultation with the relevant stakeholders.

CHARACTERISTICS OF RURAL COMMUNITIES IN QUEENSLAND

A common denominator of all rural communities in Queensland is that the origins of their existence involved substantial, sometimes exclusive links with primary industry in the surrounding region. However, within this criterion, there is diversity, for the primary industry may have been wool growing or beef or dairy cattle, iron ore or coal mining, fishing or timber getting, broad-acre wheat farming, fruit or sugar growing, intensive horticulture or various mixes of different types of primary industry.

Settlement in rural Queensland is characterised by a string of provincial cities along the coast and a large number of smaller inland centres often associated with rail and road transport corridors. Queensland is the most decentralised State and has a higher proportion of small rural settlements. At the time of the 1991 Census, 38% of the Queensland population was located in regions outside Brisbane and Moreton (South East Queensland). By comparison 32% of the Australian population lies outside the metropolitan divisions. The current populations of regions outside South East Queensland according to the Australian Bureau of Statistics, 1991 Census - Selected Characteristics. (All persons) are listed at Appendix 1.

Estimates of population change by the State Government Department of Housing and Local Government (1991) *Recent Population and Housing Trends* suggest population stability in the South West and population decline in the Central West and North West. An estimate of the share of the State's population growth by region outlined at Appendix 2 for the 12 month period ending 30 June 1990 indicates significant growth in coastal regions. Most rural regions and settlements are experiencing varying degrees of growth, however some are static or showing slow decline.

Patterns of growth within Queensland rural regions also vary. According to Debra Wilson Consulting Services Pty Ltd (1992) *Queensland Rural and Remote Settlements Study* over half the LGAs experiencing low growth are in western Queensland, whereas over half of those experiencing high growth are in coastal areas as described at Appendix 3.

Characteristics of rural populations can differ significantly from those of metropolitan populations and vary between rural regions in accordance with differing social and economic circumstances. According to the Australian Bureau of Statistics, 1991 Census, for example, there are a number of rural communities in which the employment rate is significantly below the state average. However there are others where the rate is more than double the average. Similarly, although there are some rural communities in which there is higher than average aged population, there are others with significantly younger populations. A further example is self employment, which is more prevalent in some rural areas than in others including Brisbane as illustrated in Appendix 4.

Researchers have sought to classify the differences that exist in rural areas to highlight the diverse nature of rural settlements and emphasize the issues of importance that policy makers in both the public and private sector should consider. Sorenson in 1992 classified 1489 Australia non-metropolitan locations according to the population, age structure, incomes, employment and industry attributes. This classification has been set out at Appendix 5 and applied to the Queensland context.

Better understanding the diverse social, economic and environmental circumstances of rural communities will assist both the public and private sector to more accurately identify key attributes of rural communities which must be taken into account by public and private sector agencies.

CONTRIBUTION OF RURAL QUEENSLAND

There is a growing body of rural research which gives some indication of trends and points to the factors which will either threaten or promote the viability of rural communities. Before examining some of these recent findings however, it is useful to examine the context in which rural communities are placed.

Rural Queensland makes a valuable contribution to the prosperity and identity of the state and the nation. Rural exports accounted for 34% of Queensland's overseas exports in 1992-93 and crude minerals accounted for a further 38.4%. Rural industry as a whole therefore accounts for more than two thirds of our state's overseas exports and rural Queensland generates over 14% of Australia's exports.

Approximately 36% of small businesses and 42% of self employed persons are located in rural and remote areas. Small business is a major employer and generator of rural economic activity. Small businesses are often interdependent with the major rural based industries.

As well as making a significant economic contribution, rural communities help to define the Queensland character and values in a changing world. Australia is one of the most urbanised nations in the world, yet rural Australia is still very prominent in the Australian psyche. 'The bush' and 'the outback' retain powerful connections with our history, literature, and the Dreamtime. Many people in the metropolitan and larger urban centres maintain links with rural areas by family ties that span present and past generations.

NATIONAL AND INTERNATIONAL CONTEXT

The global economy within which rural communities in Australia and Queensland should feel economically secure and be able to predict trends has changed dramatically over recent years. Global economic change has special and significant importance to rural Queensland and the state as a whole because its industrial base relies heavily on foreign markets and demand.

Major factors affecting the performance of our rural sector include the decline in traditional export markets, the emergence of new competitors in those markets, the trend towards global trade liberalisation and the shift in economic power to the Asia/Pacific region. In addition the overall structural change to our terms of trade away from commodities and to some extent minerals, and towards manufacturing and tertiary industries, including services and tourism, is also having a significant impact.

International markets are also undergoing a period of significant change. Traditional export markets for our commodities have declined under the influence of recession, excess supply, new market competitors, corrupted trading practices and bi-lateral trading agreements. Queensland's merchandise exports to major Asian markets have grown dramatically in recent years. In 1989-90 the total merchandise exports to Japan, Korea, Taiwan, Hong Kong, Malaysia, Indonesia, China and Singapore were worth $5.527 billion. The figure for 1992-93 was $6.850. billion. This represents a rise of 24% or $1.323 billion in 4 years despite the domestic and international recession and highlights the fundamental shift in the destination of Queensland exports. The proportion of total overseas exports to the Asia/Pacific region accounted for over 60% in 1991-92 compared to 25% in 1961-62.

CHANGES IN RURAL COMMUNITIES

Rural communities across Queensland have been faced with an unprecedented set of negative circumstances over the past few years. Even though their economic contribution has remained high, the combined impact of severe drought, deep recession and significant decline in commodity prices has had a detrimental effect on the rural and state economies. There have also been other significant contributing factors at play over the past few decades which have affected the viability of rural communities, to the detriment of some areas, and the benefit of others. These factors have more to do with general societal and structural changes than the level of economic robustness of the surrounding agricultural areas and include:

- Over past decades, the impact of technology right across the rural sector in the mining, agricultural and livestock sectors has reduced the demand for labour and precipitated the decline of certain towns and settlements as local employment opportunities contract.
- Technological innovation in telecommunications has revolutionised access to information and services for farms, business and households resulting in a significant decline in the duplication and reproduction of such services at many geographic locations.
- Significant changes have occurred in the geographic patterns of consumer spending in rural Queensland.
- There are increased demands for specialist services by people living in rural communities.

- Better roads, faster transport, therefore there is increased mobility of the rural population.
- There has been a growth of larger regional centres
- Some rural communities have been beneficiaries of internal rural migration at the expense of other, generally smaller centres.

RESEARCH FINDINGS ON THE LINKS IN RURAL COMMUNITIES

A study of rural towns in New South Wales by researchers from the Rural Development Centre at the University of New England at Armidale, explored the relationships between agriculture and the local economies of rural areas in New South Wales. The study examined 109 rural regions in NSW based on Local Government Areas. Variables used in the analysis were:

changes in urban (ie, rural town) population

changes in the real value of agricultural production

changes in the real value of retail turnover

changes in the number of people employed

As one might expect given the diversity of rural communities in any one state, there was no one pattern of linkages evident between the variables mentioned but there were discernible patterns. The study, entitled "Uncoupling Relationships between agriculture and the local economies of rural areas of New South Wales" indicated that in rural New South Wales, the traditional correlation between the viability of country towns and the value of the agricultural production from surrounding areas was not apparent in a significant number of instances.

In six of the regions studied, urban (country town) population growth rates of 10% or more were recorded even though there was a 20% fall in the value of agricultural production in the surrounding areas. However five of these six regions were coastal or Hunter Valley regions where rural settlement growth is likely to be associated with metropolitan to rural migration for lifestyle reasons, tourism or coal mining. Queensland rural communities in near coastal locations could expect a similar diversification of and catalyst to their economies, particularly from tourism and lifestyle relocation, and consequently a greater uncoupling of agriculture and local prosperity.

Larger regional centres in country NSW also tended to manage reasonably well despite agricultural production declines in the surrounding regions. For example, Dubbo and Wagga are in areas where the value of agricultural production fell 9.6% and 16.1% respectively over the five year period, yet both towns experienced urban population growth and retail sales growth and less than a 1% increase in unemployment.

It would seem then that the large regional centres seem to be sufficiently established and economically diversified to weather the vicissitudes of agricultural decline well. The study did not directly enquire of the fate of the smaller rural communities in the vicinity of the larger centres however. I do not think it would be drawing too long a bow to presume that with the retail power of nearby large towns being exerted in addition to depressed agricultural surroundings, the viability of the smaller communities would be negatively affected.

Another finding in the NSW report was that in nine of the regions studied, even very good agricultural economic performance did not stem the loss of population from the regions' country towns. Areas such as Moree Plains experienced an 111.3% increase in agricultural production but lost 1.3% of its population. Retail turnover in the main town of the region, Moree, rose 28.5% however. The adjacent Local Government Area, Yallaroi, increased its agricultural production by 103.9%, lost 0.4% of its population, and a massive 24.5% of its retail turnover. Eight of the nine regions which lost population despite strong growth in agricultural production possessed fewer than 10,000 in population.

The study did identify twelve regions where agricultural production and country town growth were strongly linked - six of these had experienced strong population growth with a rise in agricultural production, while the other six had declining population growth in line with declining agricultural production. However, the data does warrant a fuller investigation for its significance to be fully revealed. For instance, Corowa showed the greatest positive correlation with a 30.9% increase in the value of agricultural production and a 27.6% increase in population. However, these figures must undoubtedly be influenced by the massive investment of the trans-national Bunge Corporation which has established the biggest single piggery in the world at Corowa, and the associated research and development facilities, feedmill, abattoir and smallgoods factory. More research into the types or combinations of industry best able to retain or attract population in rural communities, and other factors associated with population maintenance would be useful for decision makers, both private and in government.

FUTURE CHALLENGES

The diversity and contribution of rural Queensland has been identified. It has also been noted that societal and labour market changes - better roads, vehicles, shopping, entertainment and service patterns and decreased farm employment, have made inroads on the viability of some rural communities. The NSW study indicates that while many of the small rural communities are still very dependent on the prosperity of the surrounding district, a significant number are not faring well despite their regions' prosperity.

It seems that the future viability of small rural communities will be linked to their ability to maintain, enhance and develop key services and opportunities that they are able to offer people in their locality - services which are not only economic or functional in nature, but also a range of social and cultural benefits which foster a sense of community and a positive attitude to its continuation.

Essential elements to consider in this process are the role of government and rural communities as well as the dynamics of leadership and partnership.

GOVERNMENT

Government activity at all levels impacts on rural communities. This paper examines activities and influences at the State level. In 1991 the Rural Communities Policy Unit (subsequently renamed the Office of Rural Communities in 1992) was established as the lead agency to inform the Queensland Government on all policy and program matters affecting rural communities. It was tasked with assisting Government to generate fair access for rural communities to social and economic opportunities and identify opportunities to improve delivery of services to rural communities.

Key strategies utilised by the Office to improve outcomes in rural communities include highlighting the importance of rural communities to all levels of government, ensuring a whole of Government approach is applied to strategic policy co-ordination and planning, liaising with relevant public and private sector stakeholders, identifying collaborative and flexible service delivery mechanisms appropriate to rural communities, promtoing consultative and partiicpative practices and supporting rural community efforts to build on the strengths already established. Specific initiatives included:

- establishing the Rural Communities Startegic Co-ordination Interdepartmental Committee in 1993 whereby the Deputy Premier as Minister for Rural Communities meets with heads of all state Government departments to identify improvements in the Government management of rural community issues;
- participating in interdepartmental and intergovernmental working groups at the federal, state and regional level which are considering policy and program changes which affect rural communities to ensure the social and economic impacts are assessed from a whole of Government and rural community perpspective; and

- advising on matters affecting rural communities discussed in departmental Cabinet submissions and departmental program and information strategic plans

The Office also actively promotes activities within Government which result in the development of innovative and cost effective service and information delivery strategies to rural communities. Particular examples include:

- the establishment and future extension of the Government Agent Pilot Project providing shop front outlets in country towns, from where services from all government departments can be accessed;
- increased support for local planning and economic development in rural communities;
- sponsoring an evaluation of the social impact of drought in rural communities to better inform Government of support measures required; and
- encouraging regional managers forums to examine ways to pool and better target services and thereby stretch resources to more equitably address rural community issues at the local level.

Increasingly departments are consulting rural communtities and including rural and remote strategies in their program activity. Some outcomes have been:

- the establishment, by the Department of Family Services and Aboriginal and Islander Affairs, of Drought Support Workers in seven drought stricken regions, to provide material and information support to farming families;
- increased support for multi-purpose community facilities in a number of rural communities;
- increased number of mobile specialist health services available to rural communities;
- improved Legal Aid services in rural areas;
- improved access to information about services available; and
- Regional Arts Development Fund to sponsor arts program in rural and regional Queensland.

The State Government has also acted to improve the process by which decisions on service withdrawal and reduction from rural communities are formally considered. This is done through the application of the Guidelines on Government Service Withdrawal or Reduction which were endorsed by Cabinet in 1992 which are administered by the Office of Rural Communities. The Guidelines apply to all departments except where there is an established staffing formula in place, such as in the Education Department, or to Government owned enterprises such as Queensland Rail.

The Guidelines require departments contemplating an alteration involving the reduction or withdrawal of a service in rural Queensland to assess the demand for the service through consultation, and develop a proposal which will ensure that the service, if altered, will remain accessible to rural people albeit in another mode. Local social and economic circumstances are also examined to gain a complete picture of the impact the proposed change could have. This process has assisted Government better evaluate service delivery decisions affecting rural communities.

The Queensland Government has supported a number of policy initiatives in an effort to assist people in rural communities better manage issues directing change. Programs such as Landcare to improve natural resource management, and Future Search workshops to stimulate comunity business initiatives have aimed to enhance the capacity of rural communities to respond to the challenges in their environment and have succeeded in developing appropriate strategies to effectively address emerging issues. Integral to the success of these programs is the link between high quality community leadership and successful local development and the need for Government to promote an integrated approach to issues affecting rural communities.

State Public Sector Program Management reforms are also resulting in increased accountability of decision makers for the relevance of programs in progressing agreed policy directions. These reforms aim to improve community confidence about government processes and to encourage transparency in decision making. As well regionalisation of the public sector has aimed to improve regional services and stimulate local economies. The regional delivery of government services is considered critical for achieving efficiencies and coherence at the local level.

An important Government initiative has been the establishment of the Information Policy Board. This aims to ensure that all government activity takes appropriate account of opportunities for extending services through improved technology options. Drawing together State Government information, strategic plans will improve access to services and information regarding social and economic opportunities for all Queenslanders. This has particular relevance for people living in rural and remote locations. It will enable Government to identify further improvements to the implementation of cost effective social justice strategies to increase the number and range of social and economic opportunities available.

The State Economic Development Policy outlines a policy of market enhancement. The policy recognises, above all else, that the private sector is the engine for sustainable economic growth and the role of Government is to provide a competitive, stable environment in which the business sector can operate efficiently with minimal Government interference.

Under this policy approach, Queensland aims to remain a low tax State. The Government has targeted improvements to public sector activity through extensive overhaul of public service delivery of non-commercial services, commercialisation of public service business units and progressive corporatisation of Government owned enterprises. A key component in this reform process has been the encouragement of consistency in policy making and implementation through mechanisms such as the formation of the Office of Cabinet and the creation of a Cabinet Standing Committee on Planning and Infrastructure Co-ordination.

Efforts have also been made to improve education and training systems. In particular the TAFE system is being enhanced through new structures and better links with industry. The latter is associated with enhancing employment opportunities. Of particular importance in rural communities is the encouragement of self employment incentives.

Trade and Investment promotion activities have been directed towards the strongly growing Asia Pacific region. Whilst rejecting a general strategy of direct Government intervention, Government has assisted in exceptional circumstances to assist sectors or projects where there are clear economic benefits to Queensland. The Government has provided major support to drought affected regions of Queensland and facilitated the establishment of a number of development projects, many of which are in rural Queensland.

The Government facilitates the development of all regions rather than targeting particular regions. The Government has also provided industry with technical support programs and encouraged regional bodies to identify and develop potential industry opportunities through the Regional Economic Development Program. Strategies have targeted encouraging activities which can assist communities diversify their industry base and achieve value adding.

RURAL COMMUNITIES

The maintenance of Government services is important in the survival of rural communities. However, it is wrong to presume that the maintenance of such services will, per se, ensure any area's viability. As we have seen, there are many other reasons why small rural communities are threatened. To give such areas their best chance of survival, the communities in those areas need to understand the changing influences, analyse the needs of the community – both economic and social – and the services and opportunities that must be fostered if the requirements of the local community are to be better served locally.

For such a process to be effective, wide representation from all sectors of the community is necessary– local government, farming organisations, service clubs and groups or individuals interested in cultural or recreational pursuits should participate. So too should those with an interest in social welfare, health issues, improved educational access and experience for all in the community and those interested in increasing local commerce and seeking expanded and diversified business opportunities.

The organisation of such a community "think tank" is a major task. Many communities who have gone through such a process have utilised the Future Search Workshops organised through the State Government Department of Business, Industry and Regional Development, where skilled and experienced facilitators are able to assist the community through the process of self discovery.

Since people have a variety of needs – economic, social, cultural, education, health and recreational, outcomes from Future Search processes should cover all these aspects. In days of high mobility, the fewer needs satisfied by a community, the greater the risk of out migration. Following are some examples of measures that a rural community might adopt:

- Significant emphasis placed on exploring the possibilities of economic diversification. The presence of value-adding secondary industry, craft or cottage industries, tourism development, or new export-oriented high value "crops" such as native flowers can improve the prospects of survival for rural communities greatly.
- The elderly in the community can be encouraged to stay instead of retiring to the coast by community efforts to improve health support services.
- The establishment of Adult and Vocational Education courses, or an Arts Council Branch or accessing money through the Regional Arts Development Fund could serve to provide creative and recreational opportunities which enhance the quality of life of those who reside in the district, without travelling from the district.
- Promotions such as Main Street are designed to assist the promotion of local shopping centres in smaller country towns. Retailers combine to provide and publicise a range of shopping specials and services to local customers to win back the local market share that has been lost to larger centres.

The opportunities which present themselves to rural communities during a Future Search process will vary widely because of enormous differences between our local and regional communities, and their potential for development according to their various economic and social strengths and access to appropriate infrastructure and markets. Whatever the measure of success achievable, the process has the potential to bring together all groups within a community in a positive and constructive atmosphere, and empower the community to initiate change of its choice rather than simply bow to the general forces of change that are too frequently fashioning decline.

LEADERSHIP

A community's process of self discovery is one thing, but it falls far short of self realisation. Future Search Workshops and similar processes won't effect appropriate changes in themselves. The workshops are facilitory measures, which can provide a catalyst in the evolution of the community. There is no guarantee of change however. A divided, or complacent community will be unlikely to derive much benefit from such an exercise, while a community characterised by receptivity to new ideas, participation and co-operation, can gain much from the process. Recent studies in Europe and North America have found that the presence of someone or some group with leadership ability is of great importance in regional economic development. In Queensland, there is certainly much anecdotal evidence that high quality community leadership has a significant causal link with local development.

A current study by Dr Tony Sorenson of the University of New England is examining why some rural communities in Queensland, such as Longreach, Blackall and Barcaldine have experienced moderate but definite prosperity over a five year period, while others of similar size are faring poorly. Rural communities in the study have been chosen so that there is comparability of function, environment, location, economy, resources and even climate. A principal aim of the research is to gauge the relative importance of community leadership itself to the economy and social well-being of the area. Also being explored are the qualities of leadership important to the development of rural communities, and the source of that leadership.

PARTNERSHIP

In the field of service delivery, there are both old and new examples of the State Government working in partnership with local organisations for the benefit of rural communities. In the field of education, the Priority Country Area Program (PCAP) which is administered by the Education Department, has for fifteen years provided funds to specifically overcome the educational disadvantage of rural children. A principal strength of the PCAP program has been that Local and Regional Area Committees comprising rural parents and educators have had a major prioritising and decision making role with regard to how funds were spent. The purchase of buses to transport school children to sporting events and excursions, and the establishment of a highly successful music program have been but two of many measures which have enriched rural children's educational experience through this partnership.

The Drought Support Workers who were appointed in 1993 are funded by the State Government, but they were all interviewed and appointed by local rural groups, and work out of premises provided by these groups.

The Regional Arts Development Fund is another example of a successful partnership between the State Government and Local Government Authorities in providing funds for local arts initiatives.

In terms of planning for the future of country towns in a broader sense, partnership between Government and rural communities has a crucial role to play. Successful partnerships are those in which each partner is clear about the other's role and direction. Partners should consult with each other on matters of concern, and keep the communication channels open. Good partnerships allow for innovative practices to be judiciously combined with established success. In a partnership there should be occasions when deserved praise is given, and constructive criticism, when warranted.

The current challenges being faced by many rural communities will be best managed by the concerted action of all with a vital interest in the outcome–- rural communities themselves, local government, industry organisations, and state and federal government. With access to increased knowledge, co-operation, and leadership rural communities can be best positioned to respond positively to the challenges ahead and emerge, different, diversified, but stronger.

As I see it, the future challenge for both the public and private sector is to create a process in which relevant stakeholders can appropriately participate in the decision making process. Policy formulation needs to accurately and coherently consider the impact of future decisions on rural Queensland, take into account the integrated context of rural existence and reflect a sophisticated approach to rural change. Importantly, the approach agreed will need to provide a realistic set of expectations and be viable within resource constraints.

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APPENDIX 1

Populations of Queensland Regions outside Brisbane

Source: Australian Bureau of Statistics 1991 Census - Selected Characteristics (All persons)

Statistical Division	Total	% of State
Darling Downs	185497	6.2
South West	27934	0.9
Wide Bay/Burnett	195280	6.6
Fitzroy	167641	5.6
Central West	13771	0.5
Mackay	113782	3.8
Northern	183353	6.2
Far North	201922	6.8
North West	39056	1.3

APPENDIX 2

Queensland Regions: Estimates of Population Change

State Government Department of Housing and Local Government (1991) Recent Population and Housing Trends

Statistical Division	Share of Growth(%)
Brisbane	38.7
Moreton	32.9
Darling Downs	3.8
South West	0.0
Wide Bay/Burnett	8.4
Fitzroy	3.2
Central West	-0.1
Mackay	2.6
Northern	3.6
Far North	6.9
North West	-0.1

APPENDIX 3

Queensland Regions: Patterns of Growth

Source: Debra Wilson Consulting Services Pty Ltd (1992) Queensland Rural and Remote Settlements Study

Growth Category		Coastal	Hinterland	Western	Total
Low Growth	LGA	-	11	14	25
	%	0.0	16.4	53.9	19.4
Moderate Growth	LGA	23	40	9	72
	%	63.9	59.7	34.6	55.8
Growth	LGA	13	16	3	32
	%	36.1	23.9	11.5	24.8
Total	LGA	36	67	26	129
	%	100.0	100.0	100.0	100.0

APPENDIX 4

Queensland Regions: Characteristics of Population

Source: Australian Bureau of Statistics, 1991 Census - Status of Worker (Employed Persons)

Growth Category		Coastal	Hinterland	Western	Total
Low Growth	LGA	-	11	14	25
	%	0.0	16.4	53.9	19.4
Moderate Growth	LGA	23	40	9	72
	%	63.9	59.7	34.6	55.8
High Growth	LGA	13	16	3	32
	%	36.1	23.9	11.5	24.8
Total	LGA	36	67	26	129
	%	100.0	100.0	100.0	100.0

APPENDIX 5

Sorenson's Classification Applied to Queensland Rural Communities

a) Service Centres

(1) Service centres and their satellites;

(2) Low level services and low incomes.

These are the dominant form of settlement and, because of their service role, are particularly sensitive to changes in government and private sector services. Queensland examples include Barcaldine, Miles, Quilpie, Boonah, Childers, Esk, Maleny, Ingham, Texas and Yeppoon.

b) Dominant Special Function

(3) Local government employment;

(4) Railway and transport towns;

(5) Materials processing; and,

(6) Primary production and processing.

Communities of this type have a narrow employment base and are vulnerable to changes in the dominant sector upon which they rely. In Queensland these communities include Aramac, Boulia, Burketown, Croyden, Duaringa, Georgetown, Kilkiven, Thargomindah, Alpha, Ayr, Giru, Gladstone, Helidon, Killarney, Mossman, Sarina and Yandina.

c) Farming Communities

(7) Small farming and fishing communities;

(8) Low level farming and services; and,

(9) Farming communities - older age structure.

(10) Low level services, young unqualified workers;

Factors affecting agricultural production have a disproportionate impact on these communities, which include centres such as Tambo, Wandoan, Augathella, Goomeri, Imbil, Prosten and Yelarbon.

d) Miscellaneous Service

(11) High income professional services;

(12) Upwardly mobile working class; and,

(13) Public administration and defence.

These centres deliver specialist order services and a significant proportion of their populations are highly skilled. Queensland examples include Clermont and Emerald.

e) Resorts and Retirement

(14) High status resorts;

(15) Ski resorts;

(16) Resorts and Retirement functions;

(17) Retirement and some resort functions; and,

(18) Low income retirement.

These types of settlement generally have high population growth rates. There are often large numbers of high income visitors and services workers. The rapid growth of centres dominated by retirees has implications for government capacity to provide services for their ageing populations. Settlements in this cluster include Airlie Beach, Kooralbyn, Port Douglas, Buderim, Mooloolah, Tewantin/Noosa, Burrum Heads, Mission Beach, Caloundra, Lucinda and Tin Can Bay.

f) Mining

(19) Mining A - multi-function;

(20) Mining B - heavy mining dominance; and,

(21) Low level mining.

Towns in this category are very common in the Fitzroy, Mackay and North West SDs. Some of these are also regional service towns, as well mining centres. Those with a heavy mining focus consequently have a narrow economic base and are vulnerable to changes in mining activity. Examples include, Collinsville, Mount Isa, Blackwater, Dysart, Moranbah, Moura and Weipa.

g) *Aboriginal and Torres Strait Islanders*

(22) Aboriginal, strong professional and service;

(23) Aboriginal, local government employment;

(24) Aboriginal, State and Federal Government;

(25) Aboriginal, part-time work; and,

(26) Young, working class and high unemployment.

These are centres of Aboriginal and Torres Strait Islander enterprise and culture. State and local government employment dominates in these communities which include Aurukun, Cherbourg, Doomadgee, Kowanyama, Lockhart River, Woorabinda, and Thursday Island.

TOWARD A QUALITY-OF-LIFE PARADIGM FOR SUSTAINABLE COMMUNITIES

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ABSTRACT

This paper suggests that the mental images that guide human creativity and action, our paradigms for rural development, are inadequate for developing communities that can coexist with metropolitan areas in a high-tech, industrialized world, and it presents a contemporary alternative. For several generations the agrarian and industrial paradigms were accepted as appropriate for guiding social change and development. Since the mid 1960's, however, this duality has been challenged, indicating either that Kuhn's concept of paradigm is inapplicable to social science or we have been thrown into another iteration of paradigm development. Contemporary society faces both "paradigm gridlock," and "paradigm obsolescence." The paper explores the premise that our paradigms for rural development and change and presents an alternative to paradigm gridlock.

The mental images that guide human creativity and action are the most fundamental aspects of development and change. Without an image, an idea or a pattern toward which to build, no purposive change can occur. This is true for science, engineering, education, agriculture, the arts and other areas of human endeavour. It is important to recognize that all development concerns—theories, policies, plans, strategies, and actions—express ideas and values about what development is and should be. "These contrasting sets of beliefs and moral attitudes lie at the heart of the different ideological thought-worlds and their visions of the developed society; indeed, for many people the 'developed' society is virtually interchangeable with the 'good' society" (Goldsworthy, 1988). This means that the paradigms or models people bring to development issues place severe constraints around what they are willing to consider or even to perceive as possible.

Thomas Kuhn (1970) points out that "paradigm" has both general and specific applications.

On the one hand, it stands for the entire constellation of beliefs, values, techniques, and so on shred by the members of a given community. On the other, it denotes one sort of element in that constellation, the concrete puzzle- solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of normal science (Kuhn 1970 p 175).

Paradigms are perspectives "that for a time provide model problems and solutions to a community of practitioners (Kuhn 1970, p. viii). They are applied without question by community members. They "look like laws of nature, but their function for group members is not often that alone . . . they function in part as laws but also in part as definitions of some of they symbols they deploy" (Kuhn 1970, p. 183). They are the worldview, weltanschainung, combined with its meaning and value, and principles of action, with which people interact with the world (Edwards 1967, pp. 404A05;Berger and Luckman:1967).

Vision and values are thus inextricably intertwined as the fundamental bases for policy and action (Hyman and Miller: 1985; Hyman, Wadsworth and Alexander). The agrarian and industrial paradigms provide the worldview that guides most contemporary development policies. And, while the dictionary definition of "to develop" means to cause to become gradually fuller, larger, better, the intrinsic meaning of "development" differs according to one's worldview. Those following the agrarian model will seek "to develop" their household to better cope with the vicissitudes of nature and to provide a comfortable existence for their extended family. Those following the growth/modernization model will seek "to develop" their capital and increase resource utilization to produce more commodities or services for the marketplace. The differences in desires, goals, policies and actions are profound: one seeks family survival and the other seeks growth of capital.

The theme of this paper is that these paradigms are inadequate for guiding research and our worldviews for action are inadequate for guiding rural community change in our high-tech, global community, and it presents a contemporary alternative. Our reasoning begins with the premise that "rural development" is an internally inconsistent concept that embodies conflicting paradigms. The word "rural" generally brings to mind agrarian-paradigm images of rustic, pastoral, agriculture-based settings for the production of food and fibre. "Development" denotes the patterns of growth, concentration, urbanization, and industrialization of the groNThlmodernization paradigm. The result is both "paradigm gridlock," and "paradigm obsolescence." A good part of the problem arises from the growth/modernization paradigm itself.

CONTEMPORARY ROOTS FOR A NEW PARADIGM

The first part of the twentieth century was dominated by the belief that industrialism, urbanism and growth were the future of mankind. Progress was viewed as a linear continuum from agrarian to industrial society (Chart 1). Mid-twentieth century economists operationalize this paradigm as being manifest in "economic growth," sociologists as "modernization."2 The second part the century is characterized by realisation, especially in the developing areas, that the Agrarian Industrial resulting economic recipes did not lead to growth and modernization Chart 1 in many situations and eventually led to disillusionment with growth theories and a return to empirical observation and trial-and-error approaches that try to take into consideration a variety of locality specific factors. Many cultures may not want to emulate the West and wish to pursue a directions more compatible with a different worldview. Similar results occur when we try to apply it to rural development in industrialized nations.

Recent attempts to bring together the literature on development from several fields— sociology, economics and political science— tend to come to similar conclusions (Weitz:1986; Harrison:1988; Hunt:1989; Jaffee:1990; So:1990). Jaffee' review of the 2, Development' and "social change" are frequently used almost interchangeably, but they connote different concepts. Kornblum (1988, p. 566) considers social change to involve "variations over time in the ecological ordering of populations and communities, in patterns of roles and social interactions, in the structure and functioning of institutions, and in the cultures of societies." The social change literature is permeated by the assumption that economic, political and social change are part of a broader pattern of change—modernization—what varies along a traditional-modern continuum. This perspective is rooted in the works of Durkheim, Toennies, Max Weber, and Marx "Development", on the other hand, usually refers to some measurable form of "progress" along the modernization continuum, commonly measured by grofflh in gross national product (GNP). Jaffee states that this perspective assumes that growth in GNP would bring improvement in all spheres of life. Thus "development" assumes that "the economy would be richer, jobs would be created, people would have more money, the quality of life would improve, poverty would disappear, industry would expand, and life as we know it in the advanced industrial economies would be reproduced in the less-developed nations." (Jaffee:1990, p. 8) main strains of development theory (traditional/modern continuum) and growth (GNP) theory concludes with the following statement:

> Today, neither the structural modernization thesis nor the GNP/states-of-growth model claims many adherents. . . . In place of these theoretical models one finds a preference for particular socio-economic arrangements and policies as the central societal-level dimensions responsible for development." (Jaffee 1990:112).

The search for new models to deal with what are seen as the problematic aspects of the growth/modernization model has most recently been encapsulated in the idea of sustainability. Sustainability has three dimensions: when, where, and what; time, space and substance. First, sustainability refers to prolonging natural and social processes over an extended period of time. It is thus future oriented. Second, it is concerned with broad geographic areas; spatially sustainability extends generally beyond a single person, farm, plantation, or corporation. It is community, region, nation or global in scope. Third, sustainability is concerned with the interrelation of both natural and social processes. It is thus integrative and interdisciplinary in regard to the substance or content of what is being sustained.

A whole systems perspective is essential to understanding sustainability. Individual units—whether they be individuals, families, groups, farms, corporations or communities—are viewed in their broader sense as units in a larger whole. The University of California, Sustainable Agriculture Research and Education Program puts it this way:

> Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, stewardship of both natural and human resources is of prime importance. Stewardship of human resources includes consideration of social responsibilities such as working and living conditions of labourers, the needs of rural communities, and consumer health and safety both in the present and the future. (University of California 1991, p. 1)

> The report of the World Commission on Environment and Development (1987), known as the Bruntdland Report, defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It notes some of the implications that follow from sustainable development are: changing the quality of economic growth; meeting human needs for jobs, food, energy, water, and sanitation; a sustainable level of population, conserving and enhancing the resource base; reorienting technology and managing risk; merging environmental and economic concerns in societal decision making. (Rodda: 1991, p. 44)

These emerging perspectives appear analogous to Kuhn's (1970) pre-paradigm stage, "where schools' compete with one another to have their view of a discipline, and their interpretations of data, accepted by others." Thus, it is appropriate for us to begin to articulate a paradigm that focuses on sustainability and the quality of life emerges.

ROOTS OF A NEW PARADIGM: IN SOCIETY

The agrarian and industrial paradigms are sociologically rooted in the positivistic organicism of Toennies and Durkheim. Toennies viewed society as being based in interdependence. He articulated two forms of society, gemeinschaft and gese//schaft. Gemeinschaft, rooted in superstition and mutual fear of the irrational, "being based upon consensus of wills—rests on harmony and is developed and ennobled by folkways, mores, and religion" (Etzioni 1964). People are tied to each other and to the land by the natural drive to survive. Gesehschaft is social order which, being based upon a union of rational wills, rests on convention and agreement, is safeguarded by political legislation, and finds its ideological justification in public opinion. Gese/lschaft is based on specialisation and division-of-labour which isolates families from others. Peace and commerce are maintained through conventions and the underlying mutual fear. Government protects this civilisation through legislation and politics (Toennies:1957; Etzioni:1964, p. 64-65).

Both of these visions see society as imperatively coordinated. There is some overall direction and control. Society is an identifiable, tangible entity, a collectivity that has interests, goals, values and decision making in and of itself. Today global society is not imperatively coordinated. Highly industrialized nations that participate in multinational trade and cultural interactions are comparable systems. Control appears to be fragmented among nations, multinational corporations and a variety of regional and sub-national groups and organizations.

A contemporary perspective views direction and control of the community as an interactional field of people, organizations and institutions, not as a single collective with a "head." From this perspective, the overall system is neither centrally controlled nor random and chaotic. An interactional system is characterized by a variety of systemic interconnections among relatively independent units. Warren (1978) notes that the actions of the parts are negotiated among the parts rather than being directed by a central controlling unit. The shared values and norms flow from a common macro-culture which guides decision making and action in many communities. The community does not act, its parts do; and the parts understand the rules of interaction. (Warren, 1978, p. 410.)

The emerging perspective sees society not as one ordered on coerced behaviour based on fear of a war of all against all; rather, the social contract is based on altruistic accommodation and mutual pursuit of the good life. The world community, and local communities for that matter, can be seen as a series of simultaneous games where the interactions of some have greater or lesser effects on the others (Polyani: 1951; Hyman and Miller:1985). The parts retain considerable separate identity and individual autonomy in interactional interdependence with others. Communities appear different from different viewpoints; their actions have different effects on different segments of society. We refer to this idea as "the kaleidoscopic community"—the structure is dependent on the interaction of many different individual units and it appears different from different observation points. This perspective embodies the structural underpinnings of a different perspective, which we will call the quality-of-life paradigm, or simply, the QoL paradigm.

We chose the term "QoL paradigm" since the term implies a primary concern for the character of society and a focus on excellence (in contrast to the quantitative emphasis of the growth/modernization paradigm). This seems appropriate to describe a society based on values which emphasise concern for substance and sustainability. It also conveys the idea of continual efforts to focus on long-term end results and end products. The QoL paradigm emphasises developing sustainable rural communities as integral to economic and community development. Hyman, Shingler and Gamm (1994) define a sustainable community as follows:

A "sustainable community" is one in which the full range of community values and services is available to its members, and it has the capacity to transform its internal and external relations to respond to changing circumstances—both internal and external. The delivery of goods and services may be accomplished either internally or through linkages with external systems and operations. Most importantly, the quality and level of goods and services and the access to values is equivalent to the levels of the broader society.

SIX "-IZATIONS" AND TWO PARADIGMS

The following ideas are explorative, intended to begin assembling the different aspects of what appears to be an emerging paradigm. Major themes of the QoL paradigm can be seen to emerge from considering the six "-izations" of Alvin Toffler's "Second Wave" of civilisation and what we believe may be their emerging counterparts. Industrial society is characterized by standardisation, centralisation, specialisation, synchronisation, concentration and maximisation (Toffler, 1980, Ch. 4). Table 1 compares Toffler's six -izations and their QoL paradigm alternatives.

Table 1
Major Themes of the Industrial and QoL Paradigms

Industrial Society	The QoL Paradigm
STANDARDIZATION AND PUNCTUALITY	CUSTOMIZATION DIVERSITY FLEXIBILITY
CENTRALIZATION	DECENTRALIZATION
SPECIALIZATION AND PROFESSIONALIZATION	GENERALIZATION AND MULTI SKILLED
SYNCHRONIZATION	HARMONIZATION
CONCENTRATION	INDIVIDUALIZATION DISPERSAL OF LARGE/SMALL CENTRAL/PERIPHERY
MAXIMIZATION	OPTIMIZATION/APPROPRIATE SCALE

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A QoL paradigm will differ radically from the industrial paradigm. It emphasises the "ends" of social processes. Quality and flexibility are its hallmark compared to quantity and standardisation for its industrial alternative. The QoL paradigm stresses individual choice through customisation and diversity and flexibility in contrast to the industrial paradigm's other-determined tendency for standardisation and punctuality. Decentralization of power and control are the norm in both public and private sectors, and economy and government. Localities gain increased decisional autonomy-discretion—within broad societal policies. Education and employment tend toward generalization and multi-skilled individuals. People are trained in understanding and problem solving which can be applied to a number of fields. Serial careers may become the norm. Rather than industrial synchronisation of both individuals and organizations to the dictates of a central control, the QoL paradigm will allow individual discretion that is in harmony with societal values. Decision making will move toward the periphery, dispersed throughout society, rather than being concentrated in large centralized structures. The standard for success will be optimization marked by appropriate scale, rather than the bigger-is-better, most-is-best maximisation principle. The QoL paradigm eliminates the contradiction between "rural" and "development" because it focuses on the overall community as the target for development.

Our view is that the QoL paradigm does not replace the Theological Society others; it adds a third paradigm to the agrarian and industrial models. As depicted in Chart 2, this addition can be seen to create a multilinear, Agmr'•an • Industrial Socl.ery Society multidirectional field bounded by three different continuum. The Chart 2 first continuum at the base of the triangle is the agrarian-industrial paradigm of the modernization/growth model. The second continuum is an agrarian/QoL continuum which suggests the possibility of a different direction for development than industrial/urban growth. Together these two continuum create a third dimension, the QoL-industrial society continuum. Triangulated, these three continuum create a developmental field or matrix. Identifying the general principles associated with the worldviews of the three paradigms allows us to begin to understand and make conscious decisions about their appropriateness for our society.

ASPECTS OF THE NEW PARADIGM: CULTURAL VALUES

Survival, Growth or Sustainability?

Table 2 compares underlying cultural values and perspectives of the three paradigms. The first two are drawn from previous works. The QoL paradigm is a paradigm appropriate for development in the kaleidoscopic community. The agrarian perspective sees mankind as being essentially at the mercy of the elements—nature or the gods. It leads to a fatalism that precludes future-oriented planning and actions to a great degree. If one has no way to control the vagaries of nature, it is futile to plan ahead. A degree of control can be achieved through superstitions which provide explanations for why things happen, and for attempts to know and placate the spirits, gods, or God. We are at the mercy of the gods.

The industrial paradigm is founded on a belief in rationality as a way to control nature and the destiny of mankind. The emergence of the scientific method, experimentation, leads to a belief that everything can be known and hence controlled if we just know how the parts work. The result is an attempt to take things apart, separate them into their component parts, to make them more productive. A main theme is understanding how things work and then creating the ideal future—a linear idea—progress. We can know and control everything.

The QoL paradigm is founded on a belief that Humankind must live in a symbiotic relationship with nature and others. The recognition of dynamic systems—not amenable to simple linear manipulation opens our minds and actions. The recognition of multilinear possibilities—based on present choices in the context of the choices of others and environmental dynamics—leads away

Table 2
Three Forms of Society: CULTURAL ASPECTS

Characteristic	AGRARIAN	INDUSTRIAL	QoL
DOMINANT DRIVES	Survival Heredity Family	Growth, control Accumulation Class Status, Power	Sustainability Quality of Life Self-actualization Community
RATIONALITY	Superstition Fatalism	Legal-rational Science as	Value-rational Science as
multilinear			
	Custom	Linear-analytic	and synthetic
COORDINATION choice	Obedience to	Control	Agreement
	tradition	domination/dependence	interdependence
COGNITION	Irrational intuitive Superstition	Reason positivist objectivity valued	Reason–positivist objective and subjective valued
"GOOD" the	What's good for	What's good for the	What's good for
	the family is good	individual is good	community is
good	for the individual	for society (Egoistic)	for the individual (Altruistic)
RELATIONSHIP TO NATURE	Harmony with nature	Exploitative of nature competition with others	Partnership with nature and and others

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from a belief that all can be known and controlled to a belief in dynamic interdependence—the actions of each have implications for the outcomes of themselves and others and the actions of others have implications for the outcomes of themselves and others as well. This is not chaos—a randomisation of causes and effects—but interdependence of outcomes—the Kaleidoscopic community described above. Together we can work toward a high- quality sustainable society.

ASPECTS OF THE NEW PARADIGM: ECONOMY

Is more better? Or, is better better?

Table 3 compares economic aspects of the three paradigms. The QoL paradigm embodies the image of a global community. Thus, industrial society is one in which a few metropolises and mega-corporations become dominant. The QoL paradigm is one in which production and distribution systems are decentralised, characterized by intermediate scale units which emphasise appropriate technology and a balance between the core and periphery. Centralisation in industrial society would decrease opportunities for ownership and control. Decentralization in The QoL paradigm provides a higher number of opportunities for ownership and control in capitalist societies or for managing enterprises in socialist societies. The overall emphasis shifts from emphasis on quantity and maximising profit to quality and concern with satisfactory products.

Table 3
Three Forms of Society ECONOMIC ASPECTS

Characteristic	AGRARIAN	INDUSTRIAL	QoL
ECONOMY	Family-based agrarian Prosumer	Corporation-based industrial Separation of producer and consumer Profits to owner exploitation of producer (worker)	Appropriate Technology mfg /service/leisure Multi-faceted e g profit sharing "Share-ducer" (shareholder/producer)
ECONOMIC VALUES	Sustenance & Survival Sufficiency	Profit & Growth Accumulation Quantity Domination (monopolistic or oligopolistic tendency)	Product & Sustainability Satisfaction Quality True competition and/or collaborative relationships
INDUSTRY STRUCTURE	Home Village Crafts Self-directed	Large Industrial Centralized control Imperative coordination	Intermediate level Decentralized Intentional (voluntary)
coordination			
TECHNOLOGY	Small Utility Manual	Speed Quantity Mechanical analog	Self-fulfilling Quality Mechanical digital cybernetic
WORKER RELATION TO PRODUCT	Makes Entire Product–Crafts Tied to land	Makes Part–Specialization Non-Skilled Labor tied to industry	Intrinsically significant –toward whole product Multi-functional worker Pursuit of career(s)
WORKER EDUCATION	Family Apprenticeships (em-player responsibility)	Self or societal responsibility (Unskilled jobs or employers want society to provide skills.)	Society for basic Industry for specific
DIVISION-OF-LABOR	Little specialize	High specialization	Multiple skills
INCOME/CAPITA	Low/capita	High/capita disparities	Fewer disparities
RELATIONSHIP TO ENVIRONMENT	Harmony with nature	Exploitative of nature Uses Non-renewable resources	Seeks Replacement Recycling, Permanence Uses Renewable resources

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There are significant implications for workers as well. In industrial society, jobs tend to be highly specialised, and structured to require minimum skills and training. Education for work tends to be either on-the-job or responsibility is placed on society to prepare people for jobs. In The QoL paradigm, the emphasis is toward producing intrinsically significant products or parts of products; this requires broader training and multiple skills. Education would be a mutually shared responsibility with society providing basic education and problem solving skills, and industry providing the specialised training required for specific jobs.

"Development" takes on fundamental differences in perspective in the paradigms. The orientation of economic units to society and the environment is different too. Industrial society tends to be exploitative of nature and capitalises on the use of "free" non-renewable resourCes. The QoL paradigm emphasises maximum use of renewable resources, recyCling, replacement and permanence. Industrial society tends to foster what is referred to as "development in communities": growth firms or industries reap the primary benefits of development with little concern for the Costs borne by the broader community.3 The costs of doing business are less than the costs of business. The QoL paradigm in Contrast, is concerned with "development of communities" in the broader perspective. Development addresses the implications of economic changes on the entire community context. The costs of doing business are the same as the costs of business.

ASPECTS OF THE NEW PARADIGM: SOCIAL

From Family to Bureaucracy to Community

Harrison's work on The Sociology of Modernization and Development finds general agreement among scholars on capitalism, at least the Western version of industrial capitalism. "The basic point is that, positive, negative or neutral, there is no argument about what is happening. Much the same might be said of capitalism, a more comprehensive example of modernity. Despite the acrimonious debates over definitions, it is generally agreed that, ideal-typically, capitalism involves numerous well documented social processes: the separation of individual workers from their means of production, a corresponding increase in wage labour and participation in a cash economy, landlessness and (at least initially) increased inequality, production for profit, large-scale, capital- intensive manufacturing, the application of technology to production, and a vastly extended division of labour—all involving widespread and disruptive changes in the social, cultural, economic and political fabric of societies." (Harrison: 1988, p. 156) Jaffee (1990, p.8) notes that even in nations that have experienced significant rates of economic growth, "many of the assumed positive by-products have not materialised. Rapid growth has not necessarily resulted in higher incomes for workers, better health care, more housing, a reduction in poverty or a more democratic or egalitarian society. On the contrary, there are numerous examples of rapid growth accompanies by a decline in the standard of living, increasing poverty, rising inequality, and political repression. In fact, these are frequently regarded as necessary, though hopefully temporary, conditions for growth."

Social organisation differs among the paradigms as well. The agrarian paradigm is centred around family, tribe or clan—others are Competitors and enemies. Industrial society changes the focus to formal organizations, bureaucraCy, separating individuals into roles and specializations. Interactions are controlled by imperative coordination. The QoL paradigm takes a broader perspective, looking at the multiple interactions of individuals in groups and communities. It tends toward integration of roles and mutual agreement in interactions. Lest we give the impression of economic determinism, it is clear that the social and political aspeCts of soCiety are different as well (Table 4). Industrial society exhibits imperative coordination which separates people from each other and fragments individuals, frequently into competing roles and responsibilities. The QoL paradigm emphasises intentional (voluntary/normative) coordination based on shared values and norms, and collaborative relationships rooted in mutual interdependence which tends to integrate and harmonise the relationships of individuals to each other and to society.

Table 4
Three Forms of Society: SOCIAL ASPECTS

Characteristic	AGRARIAN	INDUSTRIAL	QoL
SOCIETY	Family/Clan	Formal Or /Bureaucracy	Community/Global Society
SOLIDARITY	Mechanical physical force	Organic/egoistic/imperative	interactional/altruistic/ intentional (normative)
EDUCATION	By family and religion—for few	Secular open to all Technical, specialized	Diversity pubic & private generalist & specialist
LITERACY	Low–Generalist	High–Specialized	High–Generalist
CLASSES	Polarized into high and low Ascribed	Large middle classes–strong vertical structure Achieved	Few classes–multiple interests –flatter structure
ROLES	Interrelated Total person	Separation of roles–personal, occupation, etc	Integration of roles
COGNITION	Irrational Superstition	Reason–scientific objectivity dialogue	Mix of objective and and subjective Recognize spiritual as option
RELATIONSHIPS	Diffuse obligations to others—custom	Specific obligations–contractual Distrust	Choice–contractual or diffuse Mutual trust

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The "egoistic" ethical perspective of industrial society puts the individual—person, family, corporation, nation—in first place. "What's good for General Motors is good for the World." The "altruistic" ethics of The QoL paradigm sees the good of the individual and society as being inextricably intertwined. The guiding criterion is that individuals see their well-being as being tied up with the well-being of others and the overall community. "Ask not what your community can do for you; ask what you can do in your community." As standardisation, specialisation and central control are dominant themes of industrial society, so diversity, choice, and intentional coordination are characteristic of the QoL model.

ASPECTS OF THE NEW PARADIGM: POLITICAL

From Tradition to Imperative Coordination to Intentional Communities

It follows that control—politics, government, management and decisionmaking—are fundamentally different in the paradigms as well (Table 5).

Table 5
Three Forms of Society: POLITICAL ASPECTS

Characteristic	AGRARIAN	INDUSTRIAL	QoL
COORDINATION	Coercion strength	imperative/domination domination/dependency	interactional intentional interdependence/equal part
SOCIAL CONTROL	Fear ritual force	authority threat	agreement understanding
AUTHORITY	Traditional	Legal-rational	Value-rational
COMMUNITY	Geographically localized simple Total community Supernatural model	Nation State Complex high interdep Community of interests Linear model	Global community Local diversity Multiple communities Multilinear model
WEALTH AND POWER	Fixed ascribed	Open free-floating Elitist structure	More open access to elites mult elites pluralist
STRUCTURE	Diffuse	Centralized in legal political and admin	Decentralized within overall network
RECRUITMENT	Fixed ascribed	Open free-floating based on wealth, status	open free-floating wider bases
POLITICAL PARTICIPATION	Limited to higher strata	Increasing participation —toward mass parties	Demassification —toward many centers

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Today, highly industrialized nations, global corporations that participate in multinational trade, trans-national organizations and cultural interactions all defy overall imperative coordination. At the same time religious, ethnic and tribal conflicts resist central control, and governments are immobilised by competing organizations and interest groups. Control appears to be fragmented among nations, multinational corporations and a variety of regional and sub-national groups and organizations. Societal direction and control are key elements in a new paradigm.

CONCLUDING COMMENTS

It is clear that we are talking about much more than a transition to an "information age." The QoL paradigm differs radically from both agrarian and industrial society. The QoL paradigm is suited for a society dominated by mutual respect and well-being. It emphasises the "ends" of social processes. Quality and flexibility are its hallmark compared to quantity and standardisation for its industrial alternative. The QoL paradigm stresses individualisation through customisation and diversity and flexibility in contrast to industrial society's other-determined tendency for standardisation and punctuality. Decentralization of power and control are the norm in both public and private sectors, and economy and government. Localities gain increased decisional autonomy—discretion— within broad societal policies. Education and employment tend toward generalization and multi-skilled individuals. People are trained in understanding and problem solving which can be applied to a number of fields. Rather than industrial synchronisation of both individuals and organizations to the dictates of a central control, The QoL paradigm will allow individual discretion that is in harmony with societal values. Decision making will move toward the periphery, dispersed throughout society, rather than being concentrated in large centralized structures. The standard for success will be optimization marked by appropriate scale, rather than the bigger-is-better, most-is-best maximisation principle. The QoL paradigm eliminates the contradiction between "rural" and "development." It can end paradigm gridlock.

The underlying values that constitute the worldviews of the three paradigms are the conceptual filters through which all thought and action are screened. This process IS generally not conscious but rather occurs as one is perceiving things. However, once characteristics such as identified in Tables 1-4 above are made explicit, we have the option of choice—a QoL characteristic. The three paradigms can be operationalized by developing criteria for measuring the extent to which specific units (individuals, groups, organizations, communities, societies) reflect agrarian, industrial or QoL characteristics. It also follows that purposive action in one direction of the other could be pursued, yielding an infinite number of alternative futures as depicted in Chart 3.

While primarily heuristic at this point, we believe this perspective provides a vision of the future that includes viable roles for both rural communities and metropolitan areas as a basis for directing thought and action. Rural communities need not be relegated to decline or development on an industrial model—which portends their becoming non-rural. Nor do urban areas for that matter. The QoL paradigm allows communities to develop Theological according to a worldview that allows them to move in the direction of sustainable rural communities with QoL characteristics. The QoL Agrarian • Industrial paradigm provides a vision of development that allows Chart 3 diversity and change, not a single path as with modernization, stages of growth and GNP theory. This alternative worldview envisions a future of quality and diversity with many types and sizes of Community in a single global system, none having or seeking dominance. If this all sounds somewhat idealistic, it is, for that is the nature of a worldview. At the same time, the alternative worldview is idealistic as well and with quite different consequences. The choice is ours.

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"ITS A MINING TOWN..."
CULTURE AND PEOPLE'S RESPONSE TO LEAD CONTAMINATION AND MINE CLOSURE

Tara McGee — Australia

INTRODUCTION

Broken Hill, located in Far Western New South Wales, is among the many communities across Australia, and indeed worldwide, which is dealing with lead contamination. This community which has traditionally relied on mining is also experiencing the effects of severe unemployment.

This research is based on a comprehensive community study, intended to identify and interpret the nature of the Broken Hill community and its responses to lead contamination and mine closure. This research takes a holistic approach that looks beyond the individual to incorporate the interacting social, psychological, economic, political and cultural influences in the community. It also considers 'external' factors such as government policies and media, as well as the nature of the 'stressor' itself. This paper is a preliminary analysis based on results of initial fieldwork in the Broken Hill community.

There have been a wide variety of responses to the lead issue and mine closure and associated retrenchments. Responses to the lead issue range from a lack of concern and questioning of the existence of a lead 'problem', to those who are very concerned. Responses to the mine closure and retrenchments also range considerably, with some retrenched workers enjoying retirement and feel that their health has improved since being retrenched, to those retrenched workers, partners and families who have had a very difficult time. This paper considers responses, and sheds light on the cultural context in which responses occur.

This paper contains two sections. The first introduces the lead contamination and mine closure issues. It also outlines the research approach and methods on which this paper is based. The second section presents issues arising from preliminary research that focus on how cultural context influences people's responses to lead contamination and mine closure. This paper focuses on the cultural context — beliefs and values, of Broken Hill residents and community.

Another paper explores the cultural context of agencies and institutions, and the services and programs currently being used to deal with these issues.

BACKGROUND TO THE ISSUES

Lead problems are not new to Broken Hill. Mining of lead/silver/zinc began in 1883. Concern over lead poisoning of miners played an important role in major strikes of 1892 and 1919-20. In the early 1920s, a Technical Health Commission Inquiry held into occupational health issues of mine workers included lead poisoning. Dust from the mines re-emerged as a concern in the 1970s and 1980s, with open cutting and the reworking of storage dumps located in the centre of town. In 1991 a survey of the blood lead levels of 899 local children aged 0-5 was conducted. Results released in February 1992 showed that 20.3% of children tested had levels higher than 25 ug/dl, the level of concern at that time. Intervention includes testing of children's blood lead levels, 'behavioural guidelines' suggested to lower children's blood lead levels, and environmental surveys of the home environment to identify contamination sources. Dust monitoring is also being conducted. The NSW Government recently announced funding of $3.3 million for lead contamination management.

Broken Hill's population reached its maximum of just over 31 000 in 1954. The mine workforce in 1952 was 5586. Since the 1950s, there has been a gradual decline in mining operations and employment. Significant industrial and technological change since 1986 has resulted in a significant reduction in Broken Hill's mining workforce. Between 1988 and 1993, there have been a total of 983 retrenchments. In February 1993, closure of Pasminco Broken Hill's northern operations and restructuring of the southern operations, reduced the mine workforce to 846.

There is only one mine currently in operation - Pasminco's South Mine operations. The effects of mine closure include retrenchments from the mine itself, and those from supporting industry and services.

RESEARCH APPROACH

Beyond the Individual

This research is based on the view that individuals are embedded in and are inseparable from their context or social 'setting'. To understand the individual, we must study them in a group setting; to understand the group, we must study the individuals whose interrelated actions constitute it (Forester, 1989; Altman, 1992). Characteristics of both the individuals (e.g. personality characteristics and coping repertoire) and the community (e.g. social support) may affect perception towards a stressor.

A community is a series of interacting, interdependent systems. A community is made up of individuals, families and groups. There are relationships and interdependencies between individuals, groups and institutions, and within groups and institutions in the community. These levels continuously interact, therefore effects on one level will interact with those on other levels (Edelstein, 1988; Bell and Newby, 1971).

Individuals, groups and institutions have interconnections outside the community. It is necessary to consider some interventions and social processes working from outside the locality (Bell and Newby, 1971), since changes outside the community may impact on the community.

Complex, Interacting Factors

Many factors may affect the response to lead contamination and mine closure. Factors can be distinguished as 'individual', 'social', 'external' as well as the 'nature of the stressor'. People are embedded in, and inseparable from their contexts or 'social setting'. These contexts include the historical, social (Branch, K., Hooper, D., Thompson, J. and Creighton, J., 1984; Edelstein and Wandersman, 1987), economic, political (Blishen,B., Lockhart, Al, Craig, P. and Lockhart, E., 1979; Bowles, 1981), psychological, cultural and biophysical influences within the community.

'External' factors may include media and government programs and policies.

In order to begin to understand these complex issues, this research focuses on how people perceive, understand and cope - 'the perception—coping process'.

This research considers the responses to both the lead issue and the closure of the North Mine and associated retrenchments, including those from other mine-associated industries. Existing conflicts or problems may dramatically affect the ability or willingness of a community or group to respond effectively to change (Branch et al , 1984), therefore other changes in the community must be considered in order to adequately understand the social impacts of an issue. It considers responses to the interrelated changes over time.

This research approach builds upon, and contributes to recent approaches in public health, community psychology and social impact assessment.

NEW PUBLIC HEALTH

There is growing recognition of the links between social and health impacts of development (CDIH, 1988, Brown, 1990, NH&MRC, 1992, Legge, 1991; Boothroyd and Eberle, 1990). Legge (1991) presents a framework for understanding health and illness in a social context. This model provides the insights that people's health behaviours reflect their life experiences and that their life experiences are determined by broader institutional structures, cultural forces and social relations. The model indicates how responses at the personal, local and community level will express (and may influence) broader social relations and institutional structures.

The NH&MRC (1992) argue that physical, ecological, social, cultural, economic, and occupational factors affect the health of individuals and communities.

Community Psychology

Community psychology arose out of an awareness that traditional psychology was focused too individualistically (Bishop and Syme, 1992). Community psychology theory broadens the focus from the individual or family to the community, emphasising the 'ecological' perspective. However, as Seidman (1988) argues, for most of community psychology's short history, interventions and research questions have rested primarily at the individual level.

Levine and Perkins(1987) argue that if psychology and social science are to be relevant and useful for the solution of social problems, the conceptual and research approaches will have to take into account the historical, social, economic, and political contexts within which policies are developed and implemented.

Social Impact Assessment

The origins of Social Impact Assessment (SIA) can be traced back to the National Environment Protection Agency (USA) 1969 legislation. The philosophy of SIA can be described as 'technical' and 'political' (Craig, 1990). The 'technical' approach views SIA as a research exercise to predict the consequences of planned projects, and to provide information to those making decisions (CEARC, 1985; Corbett, 1990).

Bowles (1981) integrates SIA with community development, viewed as "a process which explicates the inner workings of communities and revitalises the public life of communities" (Craig, 1988).

A community SIA framework developed by Ross (1990) emphasises community control, community values and perspectives, embedding SIA in a social and cultural context, and explores impacts in a historical and regional context.

This approach considers the contributions of people's perceptions to their experiences, and responses to the impacts, and the features of a community, as a social unit, which help to avert or ameliorate, or exacerbate potential impacts (Ross, 1990).

The approach developed by Ross considers the cumulative impacts in a historical and regional context.

Research Methodology

Methods were chosen to respond to the sensitive nature of the issues, and the unique nature of the Broken Hill community. This research follows the 'theory construction' approach, with theory emerging from the data, rather than comparing data to pre-specified theory. Methodology evolves as the study progresses (Wicker, 1989). This research uses a case study approach. The use of the single case study allows thorough analysis of the Broken Hill community's response, tracing of changes over time, and analysis of the relation among 'parts' of the phenomenon(Yin, 1984). This research looks at the community response at individual, family and group levels. Participation by residents has included the development and refinement of research questions, data collection and discussion of preliminary issues.

A variety of methods are used, chosen for their potential to reveal new information on the domain. Data used in this paper was collected via semi-structured in-depth interviews with residents, participant-observation and focus group discussions. A purposive sample method was used (Babbie, 1992). The sample includes a wide cross-section of participants from various age ranges, length of residence in the area, and participation in government intervention programs. Participant-observation includes informal discussion in settings such as the local community health centre, meetings, informal discussions and everyday interaction in Broken Hill. Focus Group Meetings were held with groups of residents.

Cultural Context and Initial Responses to Lead Contamination and Mine Closure

"People make decisions and take action based on understandings derived from culture"(Bronstein, 1987).

The concept of culture has had a long and complicated history (see Thompson, 1990). My use of the term reflects that defined by Thompson (1990) as the 'structural conception' of culture. Within the 'structural conception', cultural phenomena may be understood as symbolic forms in structured social contexts in which they are produced and received. This definition recognises that symbolic forms are produced and received by individuals situated in specific social-historical contexts and endowed with resources and capacities of various kinds.

The next part of this paper examines aspects of the cultural context in which Broken Hill residents perceive, understand and cope with the lead issue and mine closure.

"Its a mining town.."

Some Broken Hill residents have responded to the lead issue, in part, by saying that since Broken Hill is a lead/silver/zinc mining town, risks or problems from lead are a normal part of living in Broken Hill.

> *"There are problems in (a)mining town"*
>
> *"It is a mining town, so you have to accept some disadvantages from it"*
>
> *"When you live in Broken Hill, you should expect something to come from the industry"*
>
> *"Its environmental. Its where you live. We choose to live here, and this is one of the problems that we choose to live with... Its just part of Broken Hill... Its just part of living in Broken Hill"*
>
> *"You've got to expect the lead here - its a lead mining town"*
>
> *"This is a mining community. The lead is here whether we like it or not"*

Health effects, if any, are a 'part of Broken Hill'. An 'acceptable' risk is not as threatening. Fowlkes, M.R. and Miller, P. (1987) found a similar response in their examination of community response in Love Canal, USA. They indicate that risk may be considered by some residents as intrinsic "to the business of living and working in modern society"(Fowlkes,M.R. and Miller, P., 1987).

"The environment was worse when I was growing up..."

Residents have varied in their perception of the 'source' of the lead problem. Some identify the source as the relatively recent open cut mines. Others feel that community lead 'contamination' occurred throughout Broken Hill's history.

> *"The lead problem is no worse now than in the past. We've had it forever. In the 1940s, there were dust storms every week"* (long-term resident)
>
> *"Well, it (the lead) has always been with us... It has always been there... Even as a kid, I always remember my father saying "if you want to go rabbiting, you go away from the city.. All the rabbits in town are leaded. You'll get poisoned from them"...there has been a problem all along here."*
>
> *"When we were growing up, we always washed our hands before eating... we always had shoes for outside... That was something that I grew up with".*

The lead (problem) is seen as familiar rather than unexpected or new. Some residents have said that the environment is cleaner (more vegetation, fewer dust storms, better housing) now than it has been in the past. Dust storms that resulted in near blackouts have played a dramatic part in Broken Hill's history.

> *"When we were growing up, there were big dust storms. It was a dusty place. You knew that it was dusty. In parent's generation, stories of dust storms. Housing has improved since those times."*
>
> *"The skimps used to blow all the time. Now the dust from the skimps is kept down"*

The current lead issue is seen as the same as, or less of a problem than that throughout Broken Hill's history.

Some people had close contact with lead when they were growing up in Broken Hill, and feel that they haven't been affected.

> *"I was one of the kids who played in the skimp dumps"... "When we (parents) were growing up, we had to be outside - we played in the dirt..."*

There is a belief that because the environment was worse before and there haven't been (visible) effects from lead, therefore there is not a problem now.

On the one hand, this view may act to minimise concern of the current lead issue. This appears consistent with the findings of Fitchen, J., Heath, J. and Fessenden-Raden, J. (1987) who examined the case of water pollution and concluded that when the cause or agent of contaminationis perceived as member of the community, the risks are less feared than when causes or agents are perceived as external to the community. On the other hand, it can also increase concern as people believe that the problem is not something new, and that action is needed to deal with the problem.

"Lead is a problem everywhere..."

Several residents have said, or asked if health effects from lead in Broken Hill are 'as bad' or 'worse' in other communities such as Port Pirie, and Newcastle. They also feel that the problem in Broken Hill is comparable to that in urban centres such as Sydney and Adelaide. Many Broken Hill residents are aware of Port Pirie's more than 10-year old lead program, through media and personal contacts. Also, media has brought the national lead issue, particularly lead in petrol to public attention. Lead pollution in Sydney has also been a focus of media and government attention.

Others compare Broken Hill's lead 'problem' to other environmental problems in other communities.

> *"Lead is a problem everywhere. In the country, you have pesticides - in the city, smog"*
>
> *"If you live in the cities you have pollution... he's (son) probably brighter growing up here than in Sydney."*
>
> *"You go to Port Pirie, and you get the same. You go to Whyalla and you get the same. You go to other mining towns, and you get different problems. You live in Sydney and you get a risk there of different things."*

Broken Hill's lead problem is viewed in relation to other communities that are dealing with lead or other environmental problems. When a report identifying lead as an Australia-wide problem was publicised, one resident said that, "people were happy, because they could see we're not the only ones."

"The wrong side of Dubbo.."

Residents are very aware of the importance of Broken Hill in Australia's development, or as one resident said, "the country was built on Broken Hill". Solomon (1988) illustrates the economic importance of the Broken Hill mining industry.

> *"By October 1966 the total of ore raised at Broken Hill reached 100 million tonnes.. The whole was valued at $1336 million... The royalties paid by the mining companies to the NSW government amounted to $185 million for the ten years 1975 to 1984. This was in addition to $157 million paid in company taxation"*

Many residents said that because of what Broken Hill has provided for the country's development, they should receive assistance to deal with the lead issue and mine closure. There is a belief that even though they should, they won't receive assistance. One resident said that *"The NSW government won't do anything here. They like the revenue but don't give anything back."*

Reasons for this include geographic isolation from Sydney. It is a common response that NSW ends at the Blue Mountains, Dubbo and Parkes. As one resident said,

> *"The government's not going to spend any money here, are they? Its too far away from the coast to worry about..."*

Another resident said that *"it's (lead) a problem because of where we are - geographically isolated from Sydney... they're not going to do anything"*.

The 'tyranny of distance' from Sydney is woven throughout Broken Hill's history. In times of need - where it took "69 years to obtain implementation of a scheme first conceived in the earliest days of white settlement in the Barrier" (Solomon, 1988).

Broken Hill residents are very sensitive to the decline in services, many of which are being removed or moved to centres to the East. In late September 1991, a rally of approximately 8-10,000 people protested government cutbacks. One resident summarises these issues:

> *"The government has done nothing! We've had to fight for everything that we've got... They are willing to take our taxes and the revenues from the mines, but they are not willing to give anything back here. They are willing to take our hospital staff, our RTA, our Telecom office... They've taken away everything from us, but they are not willing to give anything back!"*

This has contributed to a cynicism of government assistance.

Local unions and mining companies have historically had significant influence in the community. Broken Hill has been called a 'union town'. This is a reflection of the influence of unions in the community. Union involvement includes matters of law, pricing of commodities, regulation of access to the local labour market, commercial, industrial and domestic disputes, in order to "make the city a better place" (Howard, W.A., 1990). Many of these 'unconventional' areas of involvement were facilitated by the relative isolation of Broken Hill from Sydney. All unionists contributed to the hospital, a dental clinic, ambulance fund, scholarship and band funds. They also subscribe to the union-owned newspaper, the Barrier Daily Truth. The unions restricted employment to favour those having close associations with Broken Hill and excluded others from employment. In the late 1950s, the Barrier Industrial Council enforced the rule against married women in the workforce. This restriction was removed in 1981.

The mining companies have also traditionallly provided services to mine workers and families, including an amenities scheme, low-cost housing loans, maintenance of local parks and holiday accommodation in Adelaide. This type of assistance has declined in recent years.

Some Broken Hill people have grown accustomed to the services provided with assistance from the unions and mining companies. As one resident said, "we've been spoiled." Residents have come to rely on this assistance. These benefits are missed by retrenched workers.

Broken Hill people have not relied on 'outside' help, having assistance provided within the community by the unions and other community members. Broken Hill people have been called 'independent'. One resident said, "we get by the best way we can". When asked what characterises a Broken Hill miner, one respondent said "they (miners) are all very independent sort of people... they don't like to depend on anybody for anything..." One retrenched worker said that Broken Hill people do not complain about problems:

> "... *most Broken Hill people are not grizzlers. It is this independent attitude, you see. They don't discuss their troubles with you...*"

When talking about the lead issue, one resident sums this 'independence' up:

> "*you've got to look at yourself and how you live... I think that its not up to everyone else - use your own initiative, and do it... If you want something done, you should do it yourself.*"

The Broken Hill community has learned to adapt by turning within, by relying on local agencies, friends and family, or to deal with problems by themselves. This agrees with the hypothesis by Couch and Kroll-Smith (1985) that members of communities faced with chronic 'disasters' are likely to have a 'frontier individualism' which works against effective collective action. This may mean that residents will try to cope with problems by themselves.

"The Mines Will Last Forever."

Many retrenched workers said that either they, or others, believed that the mines would last forever.

> "*Yeah, that was a taken thing. Everyone realised that sooner or later, the bottom of the bucket has to be reached - ... but the mines have just seemed to dwell on all the years, and people just took it for granted... - that the mines would last forever. But in reality, they can't...*"

> "*The mines will tell you that they're almost out of ore. They've been saying that for at least 50 years, and they'll still be saying that in 50 years time, too...*"

Thus although the life expectancy of a mining community can be extremely variable, the Broken Hill field has outlasted anyone's expectations, continuing on for 100 years.

There was an expectation that mine workers would be on the mines for all of their working lives:

> "*Originally, I was brought up on the idea of being on the mines from age 15 to 62*"

One retrenched worker said that:

> "... *You get families that their fathers worked on the mines and their grandfather worked on the mines, you know, and they think that the mine is going to last forever... So there are a lot of young blokes who were under the impression that they had a job for life on the mines, ... and it just didn't happen*"

Historically, mine employment has been plentiful in Broken Hill. Traditionally, all males leaving school would be able to obtain employment on the mines. Union policy encouraged mine employment for locals. This was the case for many of the retrenched workers:

> "... *If you were born in Broken Hill, you knew that you had a job here. You see, they wouldn't employ any blokes from outside of Broken Hill... When you turned 18, you could get a job on the mines if you wanted it.*"

These long-held beliefs about the longevity of the mines and availability of employment may make the mine closure and retrenchments more difficult to accept. Freudenburg (1992) found that "when relatively good times continue at least for a generation, it is likely that the offspring of miners... will grow up learning that such employment is a good and reliable way to pay for mortgages, raise a family, and so on - provided, of course, than one is patient during times of 'temporary' setbacks. Such lessons may make it even more difficult for second and later-generation workers to believe that the next shut-down might be different from all the previous ones." (Freudenburg, 1992)

Loyalty and Pride

Pride in their work on the mines is evident in discussions with many mine workers. In his analysis of mining communities, Bulmer (1975) defines a characteristic of the traditional mining community as mining work being a source of pride and satisfaction to those who work in the industry. Many retrenched workers have felt a loss of pride or 'feeling of rejection' after being retrenched.

> "... *Over the years, you tend to be loyal to your employer... the mine companies probably don't realise... my loyalty to them. They have... let me down*"

> "*Because I've always worked hard, I've never missed a day's work in my life... worked overtime on the mines when it was required. And always considered myself to be a hard worker... (now since being retrenched...) ...I'd like to go somewhere and prove myself! You feel...that you're sort of not worthy to be working, or something like that. Even though you are quite prepared to*"

> "... *I was handed a letter and, I never... got... thanks for 33 years of service for the mining companies... Well that's still coming I suppose.*"

Many retrenched workers feel betrayed, and as one worker put it, "thrown on the scrap heap". There is a feeling among some retrenchees that because of their hard work and sacrifices that they have made for mine work, they deserve more than 'a letter'.

DISCUSSION

There is growing awareness of limitations of strictly individual focused medical and lifestyle education approaches to health. Limitations of the lifestyle or 'behaviour modification' approaches to dealing with the lead issue have been identified (Maynarad, E.J., Calder, I.C. and Phipps, C.V., 1993). Initial fieldwork results highlight the need to examine responses to the lead issue and mine closure in the social setting in which they occur.

Cultural context serves as an 'intervening variable' or factor in the perception—coping process. Cultural beliefs and values, which are embedded in the social-historical context of the Broken Hill community, affect both the perception of risk from lead and responses to the mine closure and retrenchments. As Dake (1992) states, cultural context may act to magnify one danger or problem, obscure another, selecting others for minimal attention or disregard.

An understanding of responses to the lead and mine closure issues, including the factors which affect responses, will assist in the development and provision of services and programs to deal with these issues. Sensitivity to the cultural context which underlies responses can enhance the effectiveness of interventions.

Further research is needed to explore the cultural context in which the issues are framed, and in which responses occur. There is a need to examine cultural aspects of institutional influence, including the health department's use of behavioural guidelines, policies related to unemployment, and retrenchment packages. In addition, the media as cultural phenomena need to be examined. These, in addition to other cultural aspects will be explored in the author's PhD thesis.

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DELIVERING COMMUNITY SERVICES IN RURAL COMMUNITIES: PROBLEMS AND PROSPECTS

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ABSTRACT

The use of the term 'rural' commonly categorises a broad group of non-metropolitan communities, many of which experience similar social and economic conditions. Because of the unique issues and problems they face, defining such communities in this way is a useful construct in the design and delivery of appropriate and effective community services. However, this broad categorisation does not reflect a variety of other factors which differentiate among such communities. Practical and value-related differences clearly exist, for example, between Aboriginal, mining and farming communities in rural areas.

Whether we talk of rural communities in the broad or more definitive sense, past models of community service delivery have had trouble identifying and meeting specific community needs. This paper aims to clarify some of the advantages and disadvantages of using the 'rural' construct before outlining some of the specific problems facing community service delivery in rural areas. It also aims to illustrate how, in recent years, the Division of Community Services Development (CSD) within the Department of Family Services and Aboriginal and Islander Affairs (DFSAIA) has sought to overcome these deficiencies. CSD has trialled a number of initiatives in community services delivery. These initiatives have sought to meet the diverse needs of communities within rural areas by applying more community-based approaches. They include the Drought Worker Support Scheme, Rural Social Adjustment Advisers, Remote Area Aboriginal and Torres Strait Islander Child Care, Limited Hours Child Care, improved Social Impact Assessment processes and the Cross Program Funding Initiative.

INTRODUCTION

The generic term 'rural' is often used to categorise a broad range of non- metropolitan communities. Because of the unique issues and problems they face, defining such communities in this way is a useful construct in the design and delivery of appropriate and effective community services. However, this broad categorisation does not reflect other factors which may differentiate such communities.

This paper briefly explores some of the pros and cons of using the 'rural' construct to categorise such a diverse group of communities and localities. While no definitive position is reached, the discussion suggests that while the construct has its uses, its limitations must also be kept in mind in the design of appropriate and effective community services. Viewing any community in a stereotypical fashion can have negative consequences for community service delivery.

Keeping this in mind, and whether we talk of rural communities in the broad or more' locally definitive sense, this paper suggests that past models of community service delivery have suffered from muddled perceptions of what constitutes a rural community and how they operate. Past approaches have often had trouble identifying and meeting specific rural community needs. To explore these deficiencies, the paper identifies some of the problems facing community service delivery in rural areas.

Finally, the paper illustrates how, in recent years, the Division of Community Services Development (CSD) within the Department of Family Services and Aboriginal and Islander Affairs (DFSAIA) has sought to overcome these deficiencies. CSD has trialled a number of initiatives in rural community services delivery. Reflections from several key CSD field and policy operators show how these initiatives have sought to meet the diverse needs of communities within rural areas by applying more community-based approaches.

USING THE RURAL CONSTRUCT: IS IT APPROPRIATE?

Before examining the performance of past and current models of rural community service delivery, the appropriateness of the generic construct for policy and program purposes must be explored. While the term 'rural' generally applies to non-urban areas, it is often applied in varying contexts which meld international definitions which distinguish between 'urban', 'rural' and 'remote' (ABS 1992). Certainly there are variations in how the term is applied between State Government agencies in Queensland and across Australia.

Centacare Australia and the Australian Catholic Social Welfare Commission (1993) contend that applied definitions of the term may incorporate a range of parameters,including specific distances from major urban centres, perceptions of local populations and the availability of and access to services. They further contend that the definition used often depends on the aims of the decision maker, making it difficult to reach a definitive statement on what is 'rural' or 'remote'.

While the application of this 'rural' construct is useful in the design and delivery of appropriate and effective community services, the broad categorisations applied often do not reflect a variety of other factors which differentiate among such communities. The following explores some of the arguments for and against use of the 'rural' construct.

Advantages of Using the Rural Construct

The use of the 'rural' construct remains pervasive within Government service delivery (e.g., Office of Rural Communities 1993). Some reasons why this remains so can be summarised as follows.

(i) Defining Specific SocioEconomic Disadvantages

One of the most obvious advantages of using the construct is that it delineates the particular problems facing people living in these areas, allowing decision makers to build weightings into processes used to determine resources for the delivery of human and infrastructure services. Such weightings need to be decided on a differential basis for various communities.

(ii) Raising Rural Community Profiles

Another advantage of the construct is that it raises public awareness of rural disadvantage, requiring resources for the delivery of services. This is one of the reasons behind the Queensland Government's recent release of its first Rural Communities Policy Package through the Office of Rural Communities.

(iii) Qualitative Concepts

Defining the 'rural' construct is also useful in that it provides appropriate conceptual boundaries to understand qualitative factors associated with living rurally. Rural communities and lifestyles are the subjects of research in their own right. Use of the 'rural' construct is essential if research is to be focused.

Disadvantages of Using the Rural Construct

Broad categorisation of rural communities can also have its disadvantages. Some of these include:

(i) Lumping of Non-Related Communities

Use of the broad 'rural' construct does not reflect the variety of factors which differentiate constituent communities. Socioeconomic and value-related differences exist, for example, between Aboriginal, mining and farming communities in rural areas. This makes the generic application of designated 'rural' community service delivery models potentially dangerous (e.g., see Smith 1989a).

(ii) Debunking Rural Myths

Blanket application of the 'rural' construct also may perpetuate common but unrealistic perceptions or myths about rural living (see Phillips 1993). Many such myths can be quickly debunked by primary social research.

Some of the most common myths centre upon notions of 'community' and 'rural lifestyle' and expectations about rural service delivery. Consequently, current thinking about 'innovative service models' may often be based on hearsay and rural myth rather that sound social theories and data analysis.

(iii) Stigmatisation by Classification

Use of the 'rural' construct itself may stigmatise communities as being 'disadvantaged' in some way. In the experience of CSD officers, many rural residents would argue that they have a high standard of living and resent the use of generic classifications to denote their perceived disadvantage.

(iv) Definitions of Community

There are remarkable similarities between past efforts to reach consensus on the meaning of the term 'community' and the term 'rural' (see Smith 1 989b). Rural townships, for example, may harbour several 'communities of interest', and can not be viewed as homogenous groupings for the purpose of delivering community services (see Roberts and Peitsch 1993).

Finding a Balance

Clearly, there are pros and cons to using the 'rural' construct to define the parameters of policy and program development and service delivery. While the generic classification has its uses, its limitations must also be acknowledged. Viewing any community in a stereotypical fashion can result in the failure of the community service delivery model applied.

The remainder of this paper refers to rural communities as those which suffer some form of locational disadvantage. It does not, however, refer to communities as geographically, economically and socially homogenous entities.

PROBLEMS FACING COMMUNITY SERVICE DELIVERY IN RURAL AREAS

There has been a great deal documented on problems related to community service delivery in rural communities. However, the issues differ with the nature of the 'problem' that the service is directed towards. One only need to consider the different factors at play in the establishment of a domestic violence response service in a small rural community compared to the establishment of more preventative services (see Taylor 1988, Coorey and Taylor 1989).

Many of the problems are characteristic of the types of factors that are commonly used to define the 'rural' construct (e.g., distance/isolation). Others arise from the misapplication of the construct via poorly conceived and inflexible service delivery models that do not build upon the self-reliance of local communities. Some of the major problems can be summarised as follows, and, where not otherwise referenced, relate to the typical field experiences of CSD regional and policy officers

(i) Distance, Isolation and Coordination

Distance and isolation remain among the primary barriers to effective community service delivery in rural areas. Consequent costs to resource small rural communities and to travel are high. The frequent use of fax's, telelinks, and computers remain an integral part of service development.

However, apart from the cost implications for the practical delivery of services, distance and isolation profoundly influence administrative coordination. Poor coordination among State and Federal government departments, Local government and service deliverers is a major challenge to the effective development of services (see Synapse 1994). Greater coordination efficiencies would strengthen the output of the existing but limited resource base.

The Queensland Government has, in part, developed its current Rural Communities Policy Package in response to a perception that local government and non- government providers often deal with a range of agencies with varying funding criteria, administrative arrangements and boundaries and accountability procedures. Similar problems have also been experienced in other Australian states (see Office of Rural Affairs 1991:154).

(ii) Lack of Infrastructure and Resources

A general lack of resources and community services infrastructure remains a problem in rural areas. In many small communities, the funds, facilities and personnel may simply not be sufficient to establish viable or ongoing services. Often small communities are not able to demonstrate demand for services at the same level as urban centres.

(iii) Attracting Service Professionals

Queensland rural communities have long suffered from the inability to attract and retain professional service deliverers and community sector workers. Similar problems have been experienced elsewhere in Australia (e.g., see Office of Rural Affairs 1991:154). In other cases, qualified local residents may not always be deemed the most appropriate people to carry out local community service activities.

(iv) Skills Available in Rural Towns

Operating a community service is increasingly becoming a skilled task, requiring considerable training and resourcing. Limits to the skills base of service delivery agencies has a direct affect on the management capacity of these organisations. Stakeholders in the delivery of services in small communities are often fully committed with other tasks. Practical training opportunities need to be planned and coordinated, and this is often difficult in itself.

(v) Increasing Demands Upon Community Organisations

As in urban areas, increasing pressure is being applied by all levels of Government and the community regarding quality outcomes for local community services. Consumers and funding bodies are more aware of the need for accountability. As the skills needs of organisations have increased, the development of appropriate skills has not always been able to keep pace.

(vi) Poorly Defined Roles For Local Government

Increased focus on the integration of planning for social and economic development involves local government more in service development than in the past (e.g., see McCosker 1991). Local government is now often a significant stakeholder in the development of human and community service infrastructure in rural and remote areas.

Local governments in rural areas, however, often have a limited rates base and need to develop ways to advance community service issues. This may involve the collaboration of regional affiliations of councils, seeking grants, employing consultants or accessing cross program funds to plan service needs locally.

(vii) Rural Communities Need to Be Self-Reliant

Service delivery in rural areas has commonly not focussed on building the self- reliance of rural communities (Synapse 1994). In many cases this has weakened the long term resilience of these communities to market and seasonal variations, trapping individuals and families in welfare cycles.

What Implications for Community Service Delivery?

While these deficiencies are better recognised now than in past years, many of the community services development models applied in rural Australia have failed to overcome them. The following points out some of the areas in which past service delivery models have failed.

THE PERFORMANCE OF PAST SERVICE DELIVERY MODELS

In the experience of DFSAIA regional and policy officers working with rural communities, there are many signs pointing to service failure through the application of inappropriate community service models. By and large, many of the models continue to ignore the problems outlined above. Some failures witnessed by departmental officers have arisen from the following deficiencies in the models applied:

(i) Applying Urban Models to Rural Needs

Many service delivery models and program guidelines in use throughout Queensland have evolved in high need urban areas. If they are to work, these models need to be carefully adapted to meet the rural service delivery environment. The adaption process, however, can provide the opportunity for the development of 'innovative' and locally driven models. More documentation of innovative operational models is required.

Rural communities or groups often develop their own way of doing things. While they can learn from other towns, long developmental phases may be needed in service establishment. Early, community-based planning is important because of the complexity of existing community structures and differing expectations and requirements. Important factors include the presence of a supportive local government and leadership from within the community that can get people from different sectors and with different values to work together.

(ii) The Application of Culturally Inappropriate Models

Rural communities in Queensland are not always dominated by Anglo-Saxon families. Culturally appropriate models need to be applied as required. Developing community services in rural Aboriginal communities, for example, requires an understanding of the different cultural parameters at play. Whatever the case, local people need to be able to determine appropriate service delivery approaches.

CSD experience has shown that initial contacts in communities for service development should include representatives of the various groups. This is in preference to targeting an identifiable group and relying on their ability to provide a culturally appropriate service.

(iii) Myth-Based Service Delivery Models

Rural service delivery models established on the basis of rural myths are destined for failure. If the assumptions underlying service delivery models are flawed, then the model will ultimately be misdirected. Models need to be developed on appropriate and current social data and theory.

(iv) Non-Integrated Service Models

Program-based funding has, at times, facilitated the development of local service delivery systems do not integrate the non-profit, local government and commercial sectors. This has often resulted in duplication, service under-sizing and destructive conflicts over limited resources. The application of sound community based planning processes (e.g., see ATSIC 1993) raises opportunities to resolve this problem.

In the community-based planning context, issues relating to the development of appropriately sized and resourced organisations needs careful consideration. No one community management committee can provide services across all areas of need.

CSD INITIATIVES TO OVERCOME RURAL SERVICE DELIVERY PROBLEMS

The underpinning objective of CSD is to establish 'strong, responsible communities'. CSD recognises that persisting with community service delivery models that retain many of the above deficiencies not only results in the ineffective use of Government funds, but also does not help to build the self-reliance and capacity of rural communities. Deficient models continue to reinforce welfare dependence.

As a result, CSD has, in recent years, ventured into a number of innovative services delivery models and resourcing. The following outlines a number of such initiatives by exploring the individual experiences of policy and regional officers involved in their development and operation. Each contribution details the issues that sparked the development of the initiative, briefly outlines the development of each and makes some preliminary observations of service outcomes.

Cross Program Funding

The Rural and Remote Strategy was a pilot scheme developed by CSD in 1991-92 to give rural communities the opportunity to contribute to the design of local community services. In its first years, the Strategy pooled resources from CSD subprograms (e.g., child care, disability, and community and youth) to provide communities with greater flexibility and control in the local projects which could be developed and funded.

The Strategy objectives were to provide an opportunity for small communities to effectively address their own needs and establish service models accordingly. The communities were also able to use the funding to establish a coordinated human service infrastructure which could attract and integrate other government initiatives. local government was seen as a key partner in the implementation of these projects.

Key justifications for the Strategy included the difficulties involved in establishing projects in isolated areas and the poor access rural communities have to community services.

Renamed the Cross Program Funding Initiative in 1992-93, the Strategy now operates in six rural locations, including Cooktown, Blackall, Goondiwindi, Normanton, Mundubbera and Esk/Lowood. Activities include community information and planning, coordination of volunteers and agencies, child care, family and individual support, services for older people and people with disabilities, accommodation support, emergency relief, youth projects and family violence prevention.

The Initiative sought to use community-based planning principles to enable rural communities to identify their own needs and to respond in a flexible way according to local priorities. This was done with assistance from CSD resource officers. Service models range from centre-based styles to separate services which maintain fee-for-service workers. Each community used various community planning processes, resulting in strong local ownership. Existing skills bases and the level of infrastructure available to recipient organisations were different in each case. Service development required different degrees of departmental involvement as a result.

A detailed evaluation is currently assessing the Initiative. Preliminary indications are that it provides a practical mechanism to develop services which appropriately meet local needs. It is already apparent that it has made services available to people who might otherwise have been unable to access them. Further funding was obtained by each community on the basis of the infrastructure provided by the Strategy.

Other successful outcomes for the program are shown in the high useage rate reported by the individual projects and the improved community networks and referral processes developed by the projects. Contingent on budget outcomes, the Department plans to extend the Initiative to five new localities, many in areas affected by rural adjustment processes.

Rural Family Support Program

In 1993, Queensland farm families experienced the worst drought since records were kept. As a result, CSD successfully secured funds for a six month program with the broad mandate to relieve the social stress facing affected families. Within a tight timeframe and in one of the most public social crises Queensland has seen for some time, CSD had to respond to a target group with which it was relatively unfamiliar.

As the drought worsened, newspapers reported farmers shooting livestock and watching their land blow away. This land had been passed from father to son for generations. Sons were born and raised on the farm, had only ever worked on the farm, and fully expected to bury their parents there and to continue the cycle.

This culture raised many questions for the establishment of appropriate program structures. Where would support workers be based? Who would manage them? What would they be asked to do? How would they assess the level of need, or the priority of one station over another? What could be expected of even the best qualified social worker in approaching proud and independent farm families in crisis? In servicing a family living 200 km from their closest neighbour, and 300 km from the nearest town, exactly what is it that social support means?

Because CSD has developed its expertise in delivering human services via community-based management committees, it looked for communities in which it could find management bodies that would be prepared to sponsor such a service. This led to it soon experiencing the differences in service delivery between urban and rural communities and between 'off-farm' and 'on-farm' rural culture.

Inside a month, the Department had funded the employment of three men and three women (Drought Workers) who had never met each other, and training became an early priority. CSD offered brief courses in child abuse, domestic violence and suicide prevention, social security entitlements, interpersonal skills, grief counseling, community development and stress management.

Each of the Drought Workers received a modest salary, a desk and a telephone in an office (usually in a Neighbourhood Centre). CSD targeted six drought declared areas on a map of Queensland, arranged access to vehicles and placed a high frequency radio telephone in each car. The workers had $40,000 to deliver emergency financial relief to their clients.

Within a few months, the drought strategy was receiving substantial media support. A formal program assessment by a team of experienced social and agricultural consultants rated the work of the Drought Workers as efficient and effective, and quite remarkable in the time they had been on the ground and the uncertain longevity of the initiative (see Synapse 1994).

All the Drought Workers were themselves country people not forrmally qualified in welfare delivery. They had previously 'held 'different jobs which required a largely autonomous role. They were very much like their clients. They were embraced by communities, spoke at meetings and to the media about their role, traveled thousands of miles in their cars, but often had difficulty convincing farm families to accept a few dollars to buy food for the cupboard, or diesel for the car.

What the farm families found most valuable was not the dollars, or the information about different schemes, subsidies and rebates, but the simple fact that somebody cared enough about their family to drive 100 km off the main road to visit. Many farm families did not want counseling or money, unemployment benefits or job retraining. Nor did they want help to quit their land with dignity.

A year later 50% of the drought declared properties are coming back to life. Crops are being sown and livestock are being returned to graze. Some families have had enough and are getting out. Not many have been evicted by the banks, but many tell their children that they better think of doing something else with their life, and forget about being a farmer.

The Government now recognises that drought is a periodic event, and that it is only one of a number of factors driving continued and radical restructuring in the rural industry. As such, the program has now been extended, though the emphasis will remain on general social support for farm families. The success of the program rested on accepting that people in distress in the bush do not necessarily see themselves as disadvantaged. The service delivered must be appropriate to the culture at hand.

Social Impact Assessment Unit (SIAU)

People in rural areas are only too aware that Government decisions and large-scale development projects can have both positive and negative impacts upon their standard of living, the way that their communities function and the economy of their region. Public response from rural communities against the State Government's decision to shut a number of regional rail services in 1993 stands as testament to this understanding. In response to a growing number of similar conflicts between communities and Government decision making processes in the early 1 990s, the Fitzgerald Commission of Inquiry into the use and management of Fraser Island recommended that better social impact assessment processes needed to be established within Government.

In response to this, and in 1992, the Public Sector Management Commission recommended that DFSAIA be nominated as 'lead agency' within Government in social impact assessment issues. To operationalise this role, DFSAIA established a Social Impact Assessment Unit (SIAU) within CSD in 1993 to promote consideration of social impacts within Government decision making and the land use planning processes.

Since then, CSD regional offices and the SIAU have worked to better integrate social issues into land use planning. In relation to rural communities, this has included:

- working with large scale resource developers to ensure that, in developing projects, they identify the significance of social impacts upon rural communities;
- working within State government to develop systems that encourage greater consideration of the impact of policy and service delivery decisions upon rural communities;
- working directly with rural Local governments to assist and support them to better consider the social needs of different interests within their communities when carrying out corporate and statutory land use planning;
- working with the Department of Primary Industries (DPI) to ensure that social issues achieve an improved profile within land care and other natural resource management policies and projects;
- working to ensure the social needs of rural communities are incorporated within the various regional and sub-regional planning processes proceeding across the State.

In 1994, CSD regional offices hope to improve their resource and skill base to assist rural communities in such activities. The provision of this assistance and support extends to meeting the needs of Government departments, local government, developers and community groups.

The recent moves to improve the Department's capacity to provide direct assistance in these areas has arisen from the clear need to better integrate social and environmental issues in land use and policy decision making processes. By promoting the concept and the benefits of considering social impacts, it is hoped that decisions relating to rural areas can better consider the needs and values of rural communities.

Rural Social Adjustment Advisers

The downturn in the tobacco industry in the Mareeba/Dimbula district in north Queensland is just one example of permanent restructuring occurring in the Queensland farm sector. The impacts of such restructuring are often not limited to farmers themselves, but also affect their families, seasonal and transient workers and suppliers in surrounding communities.

To address this problem in Mareeba, an Interdepartmental Working (Social Issues) Group was established in 1993 to look at the social and economic impact of local industry restructuring to more viable agricultural crops. The Social Issues Group identified the need for someone to work as a 'Social Adjustment Adviser' to work' with communities and families affected by structural adjustment on the Tablelands.

Since then, CSD has 'been working with the Mareeba community to implement the initiative. Local meetings have included workers from the tobacco industry, growers, community groups and service organisations, the Chamber of Commerce, local government and various Government departments. These meetings resulted in the establishment of a cross sectoral community management committee to oversee the position. The position will be sponsored by the Mareeba Shire Council, which will also provide office accommodation and administrative support.

A similar position has been established in Charleville to deal with the structural adjustment resulting from drought in the south west of Queensland. While funding for these positions will be provided by the Department of Primary Industries, it will be administered by CSD regional offices. The positions will work with families affected by rural adjustment by providing information, counselling, and support to re-establish in a new locality or to make other adjustments.

Limited Hours Child Care Services

The Limited Hours Care Program is jointly funded by the Commonwealth and Queensland Governments and is administered by DFSAIA. The program is an initiative of the Queensland Government under the 1988-1992 National Child Care Strategy, and is unique to this State.

The Commonwealth Government has provided occasional care throughout Australia in purpose-built centres since the early 1980's. These centres were often underutilised in smaller and rural communities and some proved not to be viable.

Under the National Child Care Strategy, 360 occasional care places were allocated to Queensland. The State/Commonwealth Agreement allowed for these places to be provided in either purpose-built centres or within a model of service delivery to be designed in Queensland for Queensland conditions.

The Limited Hours Care model was developed as Queensland's alternative to the existing occasional care program. It was developed around the notion of locating child care places alongside other services for families and using existing community facilities (e.g., neighbourhood centres, kindergartens). The setting up of these limited hours services was supported by a capital program to modify buildings, the development of operational guidelines and an operational subsidy funding formula.

Limited Hours Care is child care which is provided on an occasional, irregular or casual basis to families with young children. Such services operate a limited number of hours per week (up to 20) and provide small amounts of care (up to 12 hours per child per week) to small groups of around 14 children. It is particularly useful as parents in rural communities often require occasional child care to enable them to pursue activities such as sport, leisure, studies and voluntary community activities. Work practices in rural areas are also often irregular or seasonal.

Limited Hours Care was developed in particular to service Queensland's smaller rural communities, which could not sustain larger purpose-builtcentres. This model acknowledges that even though many rural families may not require full-time child care, their need for occasional care is still important to their well-being. They have a right to access the care appropriate to their situations in order to participate in the social and economic activities of their communities.

Organisations targeted were those already providing other services to families and considered to have the capacity to be responsive and sensitive to the unique needs and culture of their local community. The existing social infrastructure was used as a base upon which to establish the child care service. The formation of an entirely new community organisation drawing upon the same limited pool of volunteers was not required. New blood by way of parents using the child care service was introduced to these organisations.

The Limited Hours Care services provide support to families who may require additional support from social, legal or medical services. The co-location of the child care services advances opportunities for referral to these other services. The modification of buildings for Limited Hours Care purposes also tend to improve existing facilities, which are available for other compatible purposes when child care is not operating - approximately 50% of the working week.

Of the 360 occasional care places allocated between 1988 to 1992, 250 were established in the Limited Hours Care model in existing community facilities. There are now Limited Hours Care services operating in 60 locations.

An evaluation of the effectiveness of the program is to be conducted in 1994, and will involve consultation with community child care workers, service users, administrators, sponsor organisations and resource staff.

No growth funds are currently available to expand the program. Under the 1992- 1996 National Child Care Strategy, however, the Queensland gGvernment has negotiated an agreement that up to 40% of all funded places may be allocated in 'innovative' service models that best meet the needs of consumers.

Remote Area Aboriginal and Torres Strait Islander Child Care (RAATSICC)

Until recently, remote north Queensland Aboriginal and Torres Strait Island communities have had access to limited human services. Historically, these services were provided and controlled by the Government or churches and were delivered in ways desired by the provider rather than the recipients. A number of analysts have concluded that past service delivery in the institutional model had a limited positive impact upon the target group and engendered powerlessness (e.g., see Dale 1993).

Children in many of these communities often require access to services during periods of social/family dysfunction. The erosion of traditional family roles and responsibilities in many communities has resulted in severe pressures on family and clan groups.

In 1990, CSD established a new funding program aimed at promoting the well- being of children within their families and communities (later called RAATSICC). At the time, it was recognised that the development of community controlled services was philosophically sound, but limited in practice by the fact that there were very few incorporated organisations in these communities and limited levels of organisational development and maintenance.

CSD could have chosen to apply the program directly through Aboriginal and Islander community Councils. However, it had to be recognised that although performing a vital role in community management, the majority of Councils were composed of men, and it was accepted that children until approximately 14 years of age were the responsibility of local women.

To get the program established, in March 1991, a meeting was convened by DFSAIA in Cairns, and many respected female elders from remote Aboriginal communities were invited. Over three days, community by community, these women were asked to talk about the needs of their children, what sort of responses the community could provide to overcome these problems and what money and support would be needed. These issues were workshopped in small groups with Aboriginal facilitators and reported back to the main group.

At the time, it was stressed that there was a limit on the funds available under the program. People were asked to request money for the most important things that had to be done first. Information about the needs, the desired response and the financial support required were collated and available funds were allocated in a cooperative manner.

Appropriate applications were developed during the meeting. The women took these back to be signed by their Council on behalf of women and children. Funding was then received by the communities within 8 weeks of the meeting. Since then, the program has continued to operate in this highly participatory manner and has grown to incorporate the Torres Strait Region in a separate program.

Initially, communities requested small amounts of money to do something discreet (e.g., purchase and erect an adventure playground). These highly practical and well used services empowered the women to develop further services.

All meetings of the established Advisory Groups provide opportunities for training in financial accountability and programming skills. The majority of community organisations now perform these functions well.

The fact that the program had flexible guidelines on the projected use of the funds meant that any statement of need and any desired response could be supported. This helped to empower the women responsible for developing the desired service.

During the succeeding meetings (3 times a year) the women have learned from each other and have seen what is working in other communities. They have often adapted and used these successes for their own communities. There are now nine incorporated women's organisations sponsoring the program, as opposed to three in the initial funding round on the mainland and four in the Torres Strait. A further four groups are incorporating at present. There are 28 funded services operating in 26 different locations from Doomadgee in the Gulf to Saibai Island in the Torres Strait to Wujal Wujal in the south eastern Peninsula.

Service activities have included the development of safe and stimulating outdoor play centres, children's activity programs, child and family support centres, limited hours community kindergarten centres, long day care and child support programs. Each incorporates their communities own cultural and political imperatives in their operation and development. The outcomes from this program are currently being fully evaluated with cross-sectoral input.

CONCLUSIONS AND FUTURE DIRECTIONS

This Paper has suggested that while use of the generic 'rural' construct is useful in informing the Government's policy responses to the social problems in the bush, its use should not remove the need to ensure that planning for community services is based on local needs. Service delivery models must be delivered in a way that fully encourages local participation and which seeks to address the specific economic, social and political situations facing these communities.

CSD has, in recent years, taken some key initiatives in moving towards more community-based models of service planning and delivery. It has done this by taking more participatory planning approaches, better informing and resourcing local planning processes, and through placing increasing emphasis on the need to build the self-reliance capacity of communities themselves. Given the recent successes resulting from these improved initiatives, it is certain that future policy and program developments will reflect these principles and build upon these practical experiences.

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RESTRUCTURING U.S. AGRICULTURE: IMPLICATIONS FOR RURAL EDUCATION AND OTHER COMMUNITY SERVICES

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ABSTRACT

Restructuring agriculture ("neoindustrialization") enhances its linkage to the general economy through concentration and integration of production and marketing, and labor force adjustments. Jobs in agriculture for most adults and youth thus parallel job types in the general economy, so that all workers and students need to upgrade cognitive skills in literacy and numeracy, and enhance their social and cultural orientation to work. Rural obstacles include isolation, and a population that, compared to urban residents, has less education, more low-income workers, poorer public support for education, and fewer local jobs. An implied successful strategy would forge national or regional linkages with rural education and other services. Adequate linkage of some isolated residents may require their relocation to distant "supurbs," new communities from which they would commute to both farm and other jobs.

Key words: restructuring, "neoindustrialization," U.S. agriculture, education, cognitive, isolation, linkages, relocation, "supurbs."

The U.S. food and fiber system is much more closely linked to the general economy than ever before (O'Brien, 1994). This paper depicts components of the restructuring of U.S. agriculture associated with this increased linkage and explores the implications for parallel restructuring of rural education and other community services.

NEOINDUSTRIALIZATION OF AGRICULTURE

Restructuring U.S. agriculture involves three interrelated adjustments, here called "neoindustrialization." These adjustments are:

(1)concentration of production and marketing,
(2)specialization of product and function and associated integration of activities to cater to consumer demand, and
(3)reduction of farm labor, including family labor, both through farm enlargement and specialization and through increased off-farm work.

These changes amount to the evolution of a new way of life for those who produce most food and fiber and for their rural neighbors. Accordingly, they create the need for the enhancement of supporting institutions, even the creation of new ones. Neoindustrialization implies that compatible adaptations of supporting institutions, such as education and health services, will tend to be more critical to the continued advancement of agriculture and rural people than traditional public programs, such as commodity price supports. Consider the components of neoindustrialization.

Concentration of Production and Marketing

U.S. farms accounting for most sales are getting bigger and will likely continue to do so. That is the implication of the systematic changes in farm numbers by sales class from 1982 to 1987, and the expected trend in the near future. For each successive sales class above $250,000, the percentage increase in farm numbers from 1982 to 1987 was greater (Table 1). By contrast, the number of farms in all lower sales classes decreased. Moreover, the larger the sales, the greater the percentage of incorporated farms, implying greater stability of large farms through continuity of funding and management. Yet nine of ten corporate farms are still family-held.

By 1987, farms with sales of $250,000 or more accounted for fewer than five percent of all farms but more than half the value of total sales and of net cash returns. Thus, even with current levels of technology and organizational expertise, a very few farms could sell most farm products.

Table 1. Changes in U.S. Farm Numbers, by Value of Sales, 1982-1987

Farms with sales of:	Number of Farms 1982*	1987*	Percent change in number of farms
Less than $2,500	536,327	490,296	-9
$2,500 to $4,999	278,208	262,918	-5
$5,000 to $9,999	281,802	274,972	-2
$10,000 to $24,999	340,254	326,166	-4
$25,000 to $49,999	248,828	219,637	-12
$50,000 to $99,999	251,501	218,050	-13
$100,000 to $249,999	215,912	202,550	-6
$250,000 to $499,999	58,668	61,148	+4
$500,000 to $699,999	11,792	13,142	+11
$700,000 to $999,999	6,818	7,788	+14
$1 million to $5 mil.	8,123	9,738	+20
$5 mil. to $10 mil.	610	759	+24
$10 mil. or more	457	596	+30
Total	2,240,976	2,087,759	-7

*Abnormal farms excluded. The producer price index for farm products actually fell during this period from a base year value of 100.0 in 1982 to 95.5 in 1987 (Council of Economic Advisers, 1994).

Source: U.S. Census of Agriculture, unpublished data. Initial tabulation by Edward Reinsel, U.S. Dept. of Agr., Economic Research Service, Washington, DC.

The largest farms also sell most of the products least directly involved in government commodity programs and products that face the likely greatest continuing increase in consumer demand. For example, the 1987 Census of Agriculture reports that a mere 1.5 percent of all farms (the 32,000 each with sales of $500,000 or more) together accounted for:

—70 percent of sales of vegetables and melons,

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[1] Thanks go to many colleagues, particularly, Edward Reinsel, David Harrington, Robert Hoppe, and Leslie Whitener. Paper presented at the International Conference on Issues Affecting Rural Communities, Rural Education and Development Centre, James Cook University of North Queensland, Townsville, QLD, 4811, Australia, July 10-15, 1994.

—70 percent of sales of nursery and greenhouse products,
—60 percent of sales of poultry and poultry products,
—55 percent of sales of fruit, nuts, and berries, and
—50 percent of sales of cattle and calves.

Even these data do not adequately illustrate the extent of concentration of U.S. agriculture. Most important, data on farm sales do not adequately reflect the extent of organizational integration and contracting among components of the food industry, a matter we consider below.

Specialization and Integration

Specialization already concentrates production on large farms. Horizontal and vertical integration further concentrate the food and fiber system. Horizontal integration occurs when firms at the same level of production are linked through contracts or common management, procurement, and/or sales and marketing activities. Vertical integration occurs when firms increase their interdependence through ownership contracts and/or organizational provisions between two or more successive stages of production.

The leading example of specialization and integration in American agriculture is, of course, the almost totally integrated poultry industry (Christensen, 1993). About 92 percent of all broilers are produced under contract between the producer and a poultry company. The remaining 8 percent come from farms owned by a company that both supplies feed and supervision and processes the finished birds. Due to technological and organizational efficiencies achieved through integration, production of broilers, for example, zoomed from 34 million in 1934 to 6.4 billion in 1992 (Christensen, 1993). By 1993, some 20 companies produced 80 percent of the total weight of broilers (Thornton, 1993). Most turkeys (Hefferman, 1993) and eggs (Lazar, 1993) likewise come from very few firms.

Other components of the livestock industry are increasingly integrated. For example, dairies are cutting overhead costs by moving to more congenial climates, increasing herd size and herd yield, and adopting other techniques to intensify production (Fallert, Weimer, and Crawford, 1993). By 1987, there were already 1268 dairy herds of more than 5000 head in the United States, over half of which (755) were in California. Large dairies are also increasingly integrated with related activities. For example, Braum's Dairy in Tuttle, Oklahoma, is a family business with some 13,000 cows. Besides producing the milk, the Braums process fluid milk, yogurt, cottage cheese, and ice cream, and operate over 250 ice cream and dairy stores in five states. In the southwest, using subsidized irrigation (Cody and Carr, 1990), some large farms specialize in high-quality hay production (Fallert, Weimer, and Crawford). Relying on purchased feed, a dairy can add hundreds, if not thousands, of cows.

Hog production is increasingly concentrated. In 1950, over 2 million farms and ranches raised hogs, but by 1987 only about 243,000 raised any. A 1992 survey reported that fewer than 30,000 farms, each marketing 1,000 or more hogs, accounted for 78 percent of total marketings (Rhodes and Grimes). Farms generally have, of course, greatly improved their efficiency. For example, feed use declined 14 percent or 60 pounds per hundredweight of hogs and pigs sold from 1980 to 1988 (Shapouri, Mathews, and Bailey, 1994). Technology exists for more hogs to be economically produced, processed, and merchandised under integrated systems. However, laws against corporate farming and integration have slowed this change in major producing areas and helped induce a shift in production to more hospitable states, such as North Carolina and Missouri.

Beef feeding is increasingly concentrated on large feedlots. In 1964, lots with more than 1,000 head together sold only 40 percent of fed cattle. By 1990, 3.5 percent of feedlots, each with 12,000 head or more, together sold about 84 percent of all fed beef (Krause, 1992). Vertical coordination also enhances the supply of feed and animals, on the one hand, and the standardization and customer appeal of the products, on the other hand. Impediments to the integration of fed beef include the huge investment requirements and many producers' preference for traditional production methods.

Specialization, climate control, and the integration of production and marketing all tend to reinforce the concentration of crop production on very large farms, notably, in Florida and the southwest. Accordingly, California grew almost 200 percent more acres of fruit and vegetables in 1989 than in 1960 (Palerm, 1991). Increases in specific fruit, nuts, and vegetables were phenomenal, for example, almonds rose by 900 percent, wine-grapes by 650 percent, avocados by 440 percent, cauliflower by 394 percent, and strawberries by 391 percent. In 1987, some 55 farms each had nursery and greenhouse sales of more than $5 million; some 24 farms each sold $5 million or more of mushrooms, eighteen farms in the southwest each grew at least 1,000 acres of carrots, and some 312 farms each irrigated 5,000 or more acres (Unpublished data from 1987 Census of Agriculture).

Vegetable production, notably in California, benefits also from a plentiful supply of low-cost labor. The share of all U.S. farm labor expenses attributed to fruit, vegetable and horticultural specialty farms grew from 34 percent in 1974 to 41 percent in 1987 (Oliveira, Effland, Runyan, and Hamm, 1993). Rural enclaves of farm worker families have formed throughout the fruit and vegetable producing areas of California (Palerm, 1991). Some 148 communities are Latino enclaves. Sixty-one of these communities, Chicano and Mexican "Majority" Enclaves, average 65.6 percent Latino inhabitants, with an average age of 24.3 years, and an average household size of 3.6. This contrasts with the California average population which, in 1980, was 19.2 percent Latino, had an average age of 29.9 years and an average household size of 2.7. Similar enclaves are emerging elsewhere, for example, near meat packing plants in the Great Plains and mushroom farms in Pennsylvania.

Reduction of Labor

The third component of neoindustrialization is the further reduction in labor, particularly family labor. From 1975 to 1989, the value of farm output increased almost one-third at the same time as farm population decreased almost one-half (45.8 percent), and farm employment decreased one-third (33.9 percent), slightly more for farm family members (35.9 percent) than for hired workers (29.2 percent) (Council of Economic Advisers, 1994). Industries most closely related to farming achieved parallel efficiencies and hired fewer workers. Suppliers of fertilizer, equipment and other inputs lost 125,000 jobs and processing and marketing industries lost the largest number—368,000 (Majchrowicz and Salsgiver). These losses amounted to one job for every three jobs lost on the farm. They were only partially offset by new processing jobs, notably, 62,000 jobs in processing meat, mainly poultry, and 34,000 jobs in miscellaneous foods, such as macaroni and snack chips.

Increased Off-Farm Work for Farm Family Members

Meanwhile, farm family members increasingly work off the farm and many have some of their farm work performed through contracting or custom work. By 1990, the average income of farm operator households, $39,007, was similar to that of the average U.S. household (Ahearn, Perry, and El-Osta, 1993). However, the average off-farm income of the farm households was $33,265, 85 percent of their total income. Either or both spouses in 60 percent of farm operator households earned off-farm income, mainly wages and salaries. Both operators and spouses on the smallest and the largest farms earned the most off-farm income, a 1990 average of $37,276 for the smallest and $32,698 for the largest. The households in which one spouse worked off the farm had the highest household incomes and the lowest poverty rates. Average off-farm income was lowest, but still noteworthy, for dairy farms (where the nature of the enterprise limits opportunities for off-farm work) and cash grain (Perry and Hoppe, 1993)(where farm remoteness limits access to off-farm jobs).

The most remarkable difference among farm operators by income class is not their farm business characteristics, however, but their level of educational attainment (Perry and Hoppe, 1993). More than a quarter of all low-income farmers (less than $15,000) have less than a high school education. Accordingly, they are less likely to have nonfarm income (fewer than half do) and their nonfarm earnings are low (as they are also for nonfarm people with lower education levels) (Bird, 1993).

The Changing Composition of Farm and Nonfarm Labor Markets

As the overall number of jobs in agriculture continues to diminish, agriculture, like nonfarm industry, will demand proportionately more workers at each end of the spectrum of skills and abilities. First, it will call for managers and assistants who are skilled in personnel management, inventory control, operations research, and a whole gamut of technical and interpersonal skills typical of large nonfarm businesses, as well as advanced knowledge and understanding of biological processes and their application. Second, agriculture will continue to demand a cadre of low-skilled and low-paid personnel for routine, repetitive tasks.

The diminished need and more selective demand for labor in agriculture evokes the need for a parallel outside linkage of this labor and all its supporting institutions, including education, training, and health services. For two reasons, the turnover in farm and food labor is likely to exceed the net figures for population and employment loss. First, the industry will be increasingly likely to recruit professionals from outside agriculture—people skilled in marketing, inventory control, accounting, and a range of other specialties common to large businesses. Second, workers in agriculture are increasingly likely to enhance the security of their jobs and achieve career advancement by being ready, willing and able to take jobs outside agriculture and in distant locations. This changing demand for farm labor faces a labor supply within agriculture that, without explicit improvements, promises to be less likely to meet this demand. Both neoindustrialization itself and conditions outside agriculture contribute to this likely reduced matching of farm labor supply with farm labor demand. Three key challenges are as follows.

Neoindustrialization and rural communities

Neoindustrialization may tend to reduce local job opportunities and, accordingly, both the community incentive to enhance facilities and services and the individual incentive to secure the education needed for a better job. Three noteworthy instances are as follows.

Large farms bypass rural communities.

Large farms tend to bypass local communities both in obtaining specialized staff and supplies and in selling and processing their products (Krause, 1989).

Large labor-intensive farms may encourage the formation of rural enclaves of unskilled labor.

Large fruit and vegetable farms, nurseries, and other farms catering to a growing market depend on intermittent recruiting of large numbers of low-wage labor (Palerm, 1991). They thus tend to encourage the development of poor ethnic enclaves that are unlikely to have a strong revenue base and progressive schools.

State restrictions on corporations may encourage relocation.

Given the evident competitive success of large, integrated farms, states that seek to combat their growth, for example, by prohibiting farm incorporation, may simply encourage and accelerate the relocation of farm production to other states. They would thus further reduce employment and earnings in some local agricultural areas. This, in turn, could reduce local government revenues and further undermine local ability and willingness to support schools and other community services in some places.

Poor rural job prospects

Rural areas generally lag urban areas in income levels and the availability of high-paying jobs. A higher proportion of rural adult workers than employed urban workers are low earners (Bird, 1990b). In 1987, 36 percent of employed rural workers, aged 25 to 64, earned less than the official poverty income of $11,611 for a family of four, compared with the still very high 21 percent of the corresponding urban workers. At the same time, the level of educational attainment of rural workers is less than that of their urban counterparts; but the relative scarcity of good high-paying jobs dampens the incentive for both rural adults and rural youth, including farm residents, to attain higher levels of education (Hoppe and Deavers, 1993).

National labor market—increasingly challenging

Beyond the rural community, changes in the national labor market pose a formidable new challenge to both individuals and institutions. The market is increasingly bipolar, comprised of high-skilled, high-income workers and low-skilled, low-income workers (Levy, 1987; Reich, 1991). Even highly skilled and well-educated people who want to work face an increasing need to continue in lifelong education and training, and to move to new jobs, even new occupations, that best use their talents and pay them accordingly. At the same time, the United States faces an increasing challenge in preparing its millions of functionally illiterate adults for work and in training for productive work the youth who typically do not go on to college (Kuttner, 1991; Thurow, 1985). Farm and other rural people face an increasing need to prepare for and to participate in this increasingly competitive labor market.

Implications for Rural Education

For improved linkage between jobs and workers, the same quality and variety of lifetime education should be available for all residents, from preschool through college and continuing education, including both academic and vocational education. Rural students have a special need to upgrade cognitive skills increasingly demanded by growing sectors of the economy (Swaim and Teixeira, 1991). Yet rural people face special barriers to education.

At the elementary and secondary levels, technology, particularly computer and telecommunications technology, promises to offer much to isolated children, even those taught at home. Much of this improvement can be in the spirit of Australia's successful schools of the air. Perhaps the biggest scope for enrichment is an enlarged social and cultural curriculum, including the development of abilities to understand and deal with large organizations, to be aware of broadening and changing career opportunities and the requirements to achieve them. Australia's Country Areas Program (Curriculum Corporation, 1989) appears to address these problems.

Especially for geographically or ethnically isolated areas, the biggest scope for improving education may lie in a more holistic approach. Community colleges and state university and college systems have the potential to reach both adults and children in offering broad, flexible and updated curricula at innumerable sites, some reached by circuit-riding faculty. In so doing, community colleges, in particular, can help remedy the deficiencies in rural high school curricula (Bird, 1990a), as well as enhance overall, lifelong learning and training opportunities for both adults and youth.

Neoindustialization of agriculture and the limited rural nonfarm economic base exacerbate the classic isolation of rural education due to heavy dependence on local funding, local staffing, and local curriculum development and implementation. In these respects, rural Australians appear to have more holistic educational opportunities. Like the United States, each Australian state is responsible for primary and secondary education. However, unlike the United States, where the states have delegated most authority for education to local governments, each Australian state finances, staffs, and provides curricula on a state-wide basis. Australian experience may illuminate the advantages of regional support for education and other services.

Implications for Other Institutions and Programs

For many rural residents, the paucity of local job options and education may still be so great that relocation nearer to urban areas is the surest way to a better education and associated opportunities for living and working. The Australian government's Rural Adjustment Scheme offers such a way out (Stevens, 1994)—a "buyout" for farmers, in the form of grants of $45,000 to leave farming. This new program demonstrates a potentially productive alternative to the traditional U.S. commodity support programs as a boost to both competitive food production and the welfare of farm families. Its extension to nonfarm families may warrant consideration.

The continuing intractability of isolation evokes the possible need for a new institution, the "supurb" (Bird, 1993). The supurb would be a community distant from farms and ranches, but within conventional commuting distance of a city and frequent commuting by air to distant farms. Tomorrow's work world may require that more and more farm families, including successful farm families, locate so that all family members can have access to broader work, education, training, health, recreational, and cultural options, and yet can commute to the farm as needed.

What about rural health? The kinds of improvements cited for education would also help improve rural health. Educated and informed citizens who also earn adequate incomes are better able to take care of their health needs. Neoindustrialization of agriculture also involves more teamwork, so that, while farm accidents may still be prevalent, they would also be more readily detected and the victims treated. Farm enlargement and increased population sparsity do, however, place a still higher premium on the availability of a competent and rapid response to accidents and emergencies. Hence, the need for airborne services, such as those provided in Australia by the Royal Flying Doctor Service, will continue to increase.

CONCLUSION

Rural living and rural institutions offer special opportunities and special challenges. Greater linkage of agriculture to the general economy is a dominant change that calls, in turn, for a greater linkage of rural education, health, and other services to corresponding services beyond rural areas.

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CLUES TO COMMUNITY SURVIVAL: A CURRICULUM FOR LEADERSHIP DEVELOPMENT

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ABSTRACT

Why are some rural communities more vital than others? Why do some resist decline or cope with rapid growth more successfully than others? Do themes or characteristics of success exist that might provide lessons for other communities? How do traditional community institutions such as schools, health care facilities, and governance interact in the successful community? Since 1985, the Heartland Center for Leadership Development, a non–profit organization based in the U.S. Great Plains, has conducted case study research on successful rural communities. Nineteen case studies from 12 U.S. states have been completed to date, with several others in the planning stage. Findings have been analyzed and produced a listing of clues to community survival. This information has served as a starting point for the Center's training in assessment, planning and leadership skills. This paper will describe the case study research, the development and implementation of a holistic community leadership curriculum. Issues that will be addressed include: multicommunity collaboration; the importance of connecting economic development and quality of life dimensions; expanding involvement to emerging as well as established leaders; and the creation of social capital.

ABOUT THE HEARTLAND CENTER

In 1985, the Heartland Center for Leadership Development was co–founded in Lincoln, Nebraska, by Vicki Luther and Milan Wall. A Nebraska–based Board of Directors was formed in addition to a National Council of Advisors. The organization was registered as a not–for–profit, tax–exempt educational corporation under U.S. law. The purpose of the organization was to develop local leadership that responds to the challenges of the future. A major focus of Heartland Center activities has been practical resources and public policies for rural community survival and small town vitality.

Financial support for the Center has developed into a balance of grants from U.S. philanthropic foundations, contracts for services with state agencies, universities and local governments, and the underwriting of project expenses from corporations with a presence or market in rural areas.

Today, the Center conducts leadership training for volunteers, offers community development professionals specialized training opportunities, and provides a wide range of technical assistance to communities and rural service providers.

Current examples of Heartland Center activities include a leadership development curriculum developed for small town leaders in rural Oregon, training and technical assistance in strategic planning approaches for economic development for communities in a four state area of the Rocky Mountain West and staff training in community development skills for representatives of First Nations in British Columbia.

The Center also conducts applied research. In particular, the Center is well– known for its community case study research on the survival of small towns.

Case Study Research

Case studies of rural communities have been used as a longstanding method for studying and illustrating many dimensions of community life. A variety of disciplines including anthropology and sociology have employed qualitative case studies to supplement quantitative research methods. During the decade of the 1970's, studies of power distribution in rural communities were a popular research focus. Rural sociologists have explored the reasons rural residents prefer their circumstances (Dillman, 1979 and Zuiches, 1982). Taking a slightly different approach, Goudy (1983) studied the perceptual differences between leaders and residents concerning the ideal community. Allen and Gibson (1987) explored the importance of congruence in leaders' and residents' perceptions of community life. Researchers recently set out to develop a taxonomy of self–development activities in rural communities that offers interesting information on indicators of success (Flora et al.,1991).

Identifying characteristics of successful communities has also been part of the continuing discussion of the definition of community. Ronald Warren, who made such a great contribution to the field, described the "good community" as displaying certain attributes (Warren, 1973). Among these characteristics were primary group relationships, community autonomy, viability, power distribution, commitment, heterogeneity, neighborhood control and conflict.

This type of exploration of rural characteristics has not been limited to social scientists. Journalist Dayton Duncan offers a fascinating view of U.S. counties with populations of less than two people per square mile (Duncan, 1993). In addition to describing characteristics such as a strong sense of place, Duncan discusses surviving communities left at an irreducible minimum of services as a definition.

Most community developers, based on their own experience, can identify communities that seem to persist while others decline, or some that overcome internal conflicts or disasters. Beginning in 1985, however, the Heartland Center applied the case study approach to exploring the differences among communities with an emphasis on what might be learned from communities displaying signs of vitality.

The concept of community success/health became the focus ofHeartland Center case study research in an effort to discern what some communities were doing well that might provide models for other small, rural towns. From the beginning, a purpose of the research was to identify lessons that might be learned and modeled from one community to another.

Case Study Methodology

Case studies have been conducted by Heartland Center staff regularly since 1985. A methodology has been refined over time that includes traditional elements and new tools and formats developed by the researchers. A complete description of the Heartland Center case study approach is available in a 1991 publication, *Studying Communities in Transition: a Model for Case Study Research and Analysis*. A brief overview is provided here.

Selection of Communities

Communities were selected on the basis of two sources of information. First, service providers in the region were asked to identify towns that seemed to be surviving or thriving despite economic turmoil. These community service providers included representatives of services providers, bankers, clergy, university faculty and others with statewide experience.

Second, this information was cross–referenced with census data, information about school enrollments and expenditures, municipal indebtedness, retail sales and new housing starts. Telephone interviews were conducted with communities that showed strength in most areas as well as frequency of nominations. As the list of potential study sites shortened, additional information, usually print materials, was collected. When possible, geographic considerations were also used to select a community for further study in order to diversify the collection of case studies.

Interview Methods

Thorough training for interviewers was conducted and a standardized interviewer journal employed for notetaking and documentation. To identify informants in the community, position, participation in decision–making, and reputation were used as filters (Freeman, Fararo, Bloomberg, and Sunshine, 1976).

Questions focused on four major topics: quality of life, impacts of change in the economy, leadership and power, and planning for the future. Standardized formats were used for summaries of each contact developed by interviewers.

Community Profile

Based on collected information, interviewer notes and documentation, a community profile was then created. Typically five to seven pages in length and written in a feature style prose, the profile was reviewed by selected informants in the community for accuracy.

The community profile and attendant information were analyzed according to a series of checklists of characteristics and indicators of success developed by the Heartland Center. Original case study research led to the creation of a list of 20 clues or characteristics prevalent in the successful community studies. This list was later adapted and applied as part of the analysis of later community profiles.

20 Clues to Community Survival

1. Evidence of community pride.
2. Emphasis on quality in business and community life.
3. Willingness to invest in the future.
4. Participatory approach to community decision-making.
5. Cooperative community spirit.
6. Realistic appraisal of future opportunities.
7. Awareness of competitive positioning.
8. Knowledge of the physical environment.
9. Active economic development program.
10. Deliberate transition of power to a younger generation of leaders.
11. Acceptance of women in leadership roles.
12. Strong belief in and support for education.
13. Problem-solving approach to providing health care.
14. Strong multigenerational family orientation.
15. Strong presence of traditional institutions that are integral to community life.
16. Attention to sound and well-maintained infrastructure.
17. Careful use of fiscal resources.
18. Sophisticated use of information resources.
19. Willingness to seek help from the outside.
20. Conviction that, in the long run, you have to do it yourself.

Use of Clues in Curriculum Development

The list of 20 clues has provided the basis for curriculum development in the area of leadership training with a community audience. Community leadership training conducted by the Heartland Center varies from single day events to workshop series.

Keystone lecturettes, structured activities and role plays have been created focusing on the information contained in the 20 clues. These training materials emphasize the *behavior* of leaders and work from the community models described in the case study materials. For example, workshop participants, organized into small groups, are engaged in reading and analyzing one of the community profiles and listing the strengths they find in the profile. After discussion of findings, the list of 20 clues is presented and discussed further. Immediate application of the information to the current situation in the community is obvious. Discussion of what leadership behaviors create or reinforce community strengths is the next step.

This information and training approach have been found to be extremely effective and motivational for community leaders. The list of clues has also been used very successfully as a discussion guide in town hall meetings as an assessment activity in strategic planning projects. When residents attend such a gathering, they are organized into small groups and asked to select three community strengths and three community weaknesses from the list of clues.

After reporting the results of this discussion, the groups can be directed through a series of structured activities to identify issues and eventually set goals for community improvement efforts.

These training materials and activities, based on the case study research and list of clues, are also part of curriculum developed by the Heartland Center to train professional community developers. With support from the W.K. Kellogg Foundation, the Center has delivered an annual program, "Helping Small Towns Survive: a Training Program for Community Development Practitioners" in Jackson Hole, Wyoming. Practitioners of community development, whether in the setting of economic development, historic preservation, health care or public education, have found examples and models of successful communities useful in helping leaders deal with change.

New Issues for Leadership and Community Development Training

While the case study research and the resulting clues materials have provided a rich source of training activities, new issues are emerging in the field of leadership and community development training. Several important issues will be discussed here, including expanding citizen involvement, which, while hardly a new topic, has become more important than ever. The other issues may well be described as new or emerging issues: a)multicommunity collaboration; b) the need to link economic development to quality of life concerns; and c) the creation of social capital.

Expanding Citizen Involvement

Since the 1960's, increasing citizen involvement in public decision-making has been a primary value of community development programs. Arnstein's ladder of citizen involvement is still a useful measure of the continuum of involvement from tokenism to true participation (Arnstein, 1969). However, new technologies now available may change the landscape of citizen involvement in dramatic new ways. Remote communities now have the potential for interactive video conferencing that allows contact with legislatures and agencies without the travel time and costs that have been prohibitive in the past. The implications of new infrastructure such as fiber optics, expanded telecommunications and telecomputing options are yet to be applied to the problems of public decision-making and citizen involvement.

At the local level, though, most community developers and community leaders are still concerned with techniques for improving the attendance at meetings, recruiting residents to run for local government office or provide leadership in community projects. And while technology may be posing a very new image of the future, it is still true that on the U.S. Great Plains, the average age of community residents is quite high, making the recruitment of new leaders very difficult.

Expanding citizen involvement, then, remains an important issue for leadership training. Research and development must occur at both the pragmatic, local level of activity and at the level of new technological applications.

New Issues: Multicommunity Collaboration

A changing global and therefore regional and local economic context seems to be creating an advantageous situation for multicommunity collaboration. With small communities in the U.S. Great Plains areas facing survival issues of diversifying the local economy and maintaining population, any development strategy that offers an advantage is explored. Multicommunity collaboration assumes that small communi ties will be more efficient in sustaining themselves by clustering or collaboration with other small towns (Baker, 1993).

The awareness of the benefits of collaboration is not, however, widespread. Recent opinion surveys of residents in the Northern Plains report only a moderate interest in collaboration but those respondents in favor of clustering with other small towns indicated a motivation of increasing resources and development options (Choy and Rounds, 1992).

Several other influences support the increased interest in multicommunity collaboration. In the U.S., changes in federal environmental regulations have forced many small communities to collaborate on waste management, especially the use of landfills. Tourism seems to be another strong influence that draws together nearby communities in promoting attractions such as antique stores, ethnic festivals and crafts. Many small communities also find it financially necessary to collaborate on rural transportation problems and solutions.

Research on multicommunity collaboration is beginning to surface that offers case studies in collaboration (Ciglar, Stabler, Jansen and Ryan, 1992).

An analytical framework, at least in a beginning stage, is available for studying multicommunity collaboration and the circumstance that support it.

Also, a new trend in programming services that encourage and support collaboration is developing. Within the state of Nebraska, for example, the Department of Economic Development has actively encouraged the creation of the Nebraska Development Network. The Network has enlisted a membership of over 400 development organizations, small towns, local governments and agencies in an effort to enhance collaboration statewide.

Case studies that reveal successful models of multicommunity collaboration, analysis of various types of clustering and dissemination of information about collaboration projects are all avenues that should be explored. More information is needed, also, regarding the type of skills that leaders need to manage collaboration and the obstacles that are typically encountered.

New Issue: Economic Development and Quality of Life Concerns

Another issue in leadership training for community survival involves the necessary connection between economic development and quality of life concerns such as education, housing, health care and the arts. At the local or regional level, economic development has often been treated as a singular activity unrelated to the larger community context. New curriculum development that would enhance the capacity of small town leaders must broaden the perspective on economic development to go far beyond industrial recruitment or business development.

Quality of life concerns are not only linked to economic development but often offer innovative, entrepreneurial opportunities. In fact, Heartland Center case studies include examples of very small communities that focused economic development activities on creating childcare centers or subsidized housing with excellent results.

This type of information should be included in the development of leadership curriculums to expand the operating definitions of economic development in very small communities. Considering economic development in the context of all types of community needs would be more holistic and practical on the small town scale.

New Issue: Creating Social Capital

The concept of social capital as a positive influence on the survival of a community is an intriguing turn–about in thinking. Social capital can be defined as a system of norms and networks of information and associations that undergird the workings of a community.

Based on the work of Robert Putnam and colleagues who conducted long–term studies of regional governments in Italy, the concept focuses on social interactions within communities that improve the local and regional government (Putnam, 1993). Putnam found that those Italian communities with longstanding social organizations, such as choral societies, displayed additional characteristics that correlated with quality and resident satisfaction in governance and operations. According to Putnam, the sense of civic behavior and social capital comes first; it is a precondition for economic development.

Putnam's research supports the notion that high visibility in a community can create norms of behavior that positively impact community sustainability. With such visibility comes a generalized reciprocity maintained by personal and institutional networks. The result is trust and confidence in social interactions, i.e., greater social capital. In small communities, for example, high visibility is one control of consumer loyalty in that residents are likely to shop locally if shopping elsewhere is noticed and receives negative comments. Reciprocity can be seen in neighbors helping the elderly or families in distress but also operates as a value that encourages civic volunteerism in which residents see the need to give something back to the community.

Several implications can be drawn here to the training of leaders in small towns. If, in fact, the level of activity of social organizations is so vital to creating economic development, and not the other way around, then leadership training and other community development interventions should also address the possibility of increasing social capital by reinforcing social structures and community institutions.

The renewal and strengthening of existing organizations such as service clubs and social groups can be achieved through the application of leadership training to the broader social context of the community and not just a particular community improvement project. In other words, participants should be encouraged to take new skills, such as brainstorming or goal–setting, that were learned as part of a special project, and apply it to the operation of a club or social group.

Rather than separating the experience of community development volunteer experience, which is most often the case, the improved capacity building should be spread through the personal networks of the participants.

Perhaps even the creation of new organizations should be considered in the light of creating social capital and the long–term benefits that can be achieved. One of the more interesting new proposals that combines ideas of social capital, increased citizen participation and more holistic approaches to economic development is the "Communitarian Agenda" developed by Amitai Etzioni. His work, which describes the need for an increased sense of responsibility among citizens and renewal of basic community institutions, supports Putnam's research (Etzioni, 1993). While Etzioni's writing is on an urban and often national scale, much of what he describes as community renewal is applicable to smaller communities.

SUMMARY

The research–based training programs of the Heartland Center for Leadership Development use case study research and the model of successful communities as a basis for curriculum development. While expanding citizen participation remains a continuing concern, new issues including multicommunity collaboration, connecting economic development and quality of life and the creation of social capital are apparent. Providers of training and capacity–building programs and services should be dealing with these issues thorough research and development efforts.

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POSTER SESSIONS

FARMERS LEARN ALTERNATIVE WAYS TO HANDLE COMPLEXITY

Bruce Frank, Jim Norcott and Felicity McIntosh — Australia

ABSTRACT

Property managers and other rural people confronted with complex socio-economic issues often respond by increasing *productivity*. This leads to land degradation and threatens *sustainability*. A smaller number of farmers are stressing resources to feed and clothe more people, but their declining population and political base threaten *equitability* and *autonomy* of rural communities. The traditional scientific response has emphasised technological development and transfer, but this reductionist, problem-solving approach is not sufficient to cope with rapid social change influencing agro-ecological systems.

A systemic relationship-maintaining approach is needed to complement traditional research and development. Participative activities can help to develop conceptual skills and use indigenous knowledge of farmers: skills that have not been recognised and knowledge that has been discounted by managers of the technology-driven economy. In previous studies, farmer groups enjoyed using structured techniques to focus on important issues in their farming systems. This idea has been adopted by dairy action- learning teams in SE Queensland. Members are using a range of techniques to generate congruent sets of learning modules for differing environments. They are learning new ways of tackling complex issues by themselves, and recording their experiences as modules for other farmer groups to use. Difficulties being experienced by the action-learning teams and associated stakeholders include socio-political changes in roles, norms and values.

The learning focus is shifting from programmed instruction to questioning insight. This involves creativity, vision, risk and changing world-views. There are no clear answers and groups of people work out their best option given available tools. These alternative methodologies are relevant for research, development and training programs. Systems-based action-learning complements traditional linear approaches, and encourages discussion within communities to achieve common, higher-order goals.

Rural communities are facing a crisis which threatens their survival. We, the authors, are committed to the world-view that rural communities are a necessary and desirable feature of our societal system, and that their members share basic rights with urban people. There are other world-views, such as the idea that rural community decline is a consequence of modernisation: agriculture is the last sector to be industrialised, and rural migration to urban centres is predictable behaviour which will continue. This alternative world-view suggests that there may be no need for many rural communities to survive.

We recognise that the socio-economic situation in rural communities has been problematic for several years. In order to address this problematic situation, agricultural research and extension has concentrated on technological means of improving productivity, and more recently, sustainability. The world-view of many policy makers has included the implicit assumption that technological improvement would ensure stability in rural communities. This is a function of the predominant 'rational economic growth' model which infers that growth is technology-driven.

Traditional problem-solving approaches used by technologists have been linear and reductionist. These approaches are valuable where resource flows can be controlled, but they break down in highly dynamic situations. For example, the complex issue of environmental degradation is an adverse consequence of many separate technological innovations. Previous policy makers and land-holders perceived each of these innovations as necessary and desirable for national development, but collectively they contributed to serious environmental problems.

Where traditional approaches have not dealt successfully with complex rural issues, we need to consider an alternative, though complementary, approach. Individual attention to *stability*, *productivity* and *sustainability* has generated advantages, but less attention has been given to issues of *autonomy* or *equitability* in rural communities. These five universal system properties described by Conway (1985) and Marten (1988) provide a base to examine alternative ways of addressing the problematic situation of rural communities. We can ask questions of these properties in terms of space, time and flow patterns, and decision processes of rural people. For example:

> How can we enhance sustainable land management practices amongst dispersed families over the next five years?
>
> How can rural people become more autonomous in the way they manage their collective districts or catchments over the next six months?
>
> Can the benefits (and costs) of environmental management be distributed more equitably throughout the whole social system over the next ten years?
>
> Can we develop equitable information flows amongst widely separated groups in rural communities by 2001, so that they become more autonomous?

These questions stimulate a systemic or holistic approach to complex rural issues. Checkland and Scholes (1990:19) offer Soft System Methodology (SSM) as a means of describing adaptive systems which may be able to survive in a changing environment. These systems have properties of emergence and hierarchy, communication and control. Checkland and Scholes (1990:28) cite von Bulow's (1989) definition of SSM:

> a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is ideally never-ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world, and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models. These are conceived as holistic ideal types of certain aspects of the problem situation rather than as accounts of it. It is taken as given that no objective and complete account of a problem situation can be provided.

This paper will use SSM to examine the introduction of an action-learning project to groups of dairy farmers in SE Queensland and NE NSW. The project is financed by the Dairy Research and Development Corporation (DRDC), which derives most of its funds from a dairy farmer levy matched dollar-for-dollar by the

Federal Government (DRDC, 1993). As farmers fund half their industry's research and development (and will be doubling their levy from 0.263% to 0.5% of Gross Value of Product) they are entitled to an equitable say in the way their contribution is used.

The action-learning project described in this paper aims to:

1. Develop learning situations for farmers to identify problems and issues, for which they can plan remedial strategies and implement action with group support.
2. Identify the technological and economic needs of dairy farmers over the next 5-10 years using sets of complementary techniques within congruent methodologies.
3. Integrate knowledge resources of all industry stakeholders to improve communication and develop learning modules to address technological, economic, sociological and environmental issues affecting dairy production systems.
4. Involve farmers more actively in all developmental stages of R & D methodologies for complex issues.

A SYSTEMIC APPROACH TO A PROBLEMATIC SITUATION

The process of SSM analysis begins with an historical perspective of the real-world problem situation. Briefly, deregulation of the dairy industry's market milk sector is destabilising long-term relationships between stakeholders. A few salient points will illustrate the dynamic changes occurring (Ralph Leutton, pers. comm. 12-5-94):

The number of milk processors in Queensland has dropped from 35 in mid 1980's to five in 1994.

Extension responsibilities are being transferred from QDPI to the processors over a five year period.

The volume of UHT milk being processed is increasingly rapidly, and makes up a major proportion of liquid milk products exported to SE Asian markets.

Farm-gate price will be the only controlled price by the time the deregulation process is complete in 1999.

This scenario represents a radical departure from the traditional, stable system in which many farmers have lived and managed. It will require significant cultural changes in social relationships (roles, norms and values) and power bases. In order to continue in the dairy industry, farmers will need to adapt to rapid change in a complex system.

Farmers do want to find alternative ways of managing complex situations. This was reflected in three recent studies which suggested that rural people would participate in a program which challenged them to think more critically about issues of concern.

A series of 20 'one-off' workshops were organised by the Cattlemens' Union in Queensland and NSW, in which members enjoyed using simple qualitative techniques to find ways of improving their participation in research and development projects (Chamala, Frank & Karan, 1991).

Most cattlemen interviewed in north Queensland (Frank, 1994a,b) demonstrated an adequate level of conceptual skill or managerial aptitude. This is an ability to integrate abstract constructs and interpret them in new situations. Farmers express this skill in a pro-active way when faced with declining returns per breeding cow or production unit. Conceptual skill was not directly associated with adoption behaviour. In fact, many chose not to adopt technologies which scientists perceived as desirable for the cattle industry. Emery & Oeser, (1958), Chamala and Crouch (1977) and Bembridge & Burger (1977) also described the significance of conceptual skill.

The Northern Dairy Group (NDG) represents CSIRO, University of Queensland, dairy farmer organisations and relevant state departments in NSW and Queensland. In 1989-90, the NDG initiated a series of 'think-tanks' in which groups of farmers defined issues for research. These issues were included in a questionnaire for farmers at the International Dairy Congress in 1991. The participating farmers wanted to develop skills for managing financial information and appropriate technology to achieve their goals (Frank, Alexander and Chamala, 1992).

Many farmers are faced with dynamic changes in a complex system. Given that most have an adequate level of conceptual skill to manage financial and technological information in a pro-active way, we assumed that they would participate in learning activities to develop new skills for managing complex situations. Although senior industry representatives had helped to plan the project, 'grass-roots' farmers and field advisers had not been involved. As these groups were the intended 'clients' of the system, it was essential that they be involved in the intervention phase of the project.

Once the problem situation has been described, there are two main streams of analysis: cultural and logical (Checkland and Scholes, 1990). Within the cultural stream, we analyse the intervention process, and both the social and political systems influencing the problem situation.

Cultural analysis

Analysis I - intervention: As planners, we had proposed an early two-day workshop to introduce action-learning principles to eight selected advisers. We planned to form up to 20 randomly-distributed groups with trained advisers acting as facilitators, and to survey group members to establish a bench-mark of their needs. The groups were expected to participate in action-learning workshops to develop new ways of addressing these needs.

Given the above guidelines, the appointed researcher was free to choose the most suitable form of intervention. He sought the participation of departmental and factory advisers but found limited support. He decided to work closely with two interested advisers and train them in action learning principles 'on-the-job'. He postponed the workshop until a larger proportion of advisers were supportive.

Intervention involves three roles: client, problem-solver and problem-owner. The researcher perceived the advisers and farmers both as clients and potential problem-solvers. These roles were not clear, and caused early difficulties. Neither farmers nor advisers had acted as clients to initiate the intervention. Traditionally, advisers had been perceived as problem-solvers, and the farmers may not have perceived themselves either as problem-solvers or problem-owners. If intervention is defined in terms of the problem-solver's perceptions, knowledge and readiness to make resources available (Checkland and Scholes 1990), then the process of a university-based researcher introducing techniques to improve farmers' self-reliance may have been threatening to the advisers. Like most of the technical advisers, the researcher was not an experienced facilitator, and had some problems handling inter-personal issues during the intervention phase.

Analysis II - social system analysis: There is a dynamic relationship between roles (a significant social position), norms (behavioural expectations of those roles) and values (local standards to judge performance). Traditionally, dairy advisers have had an important, influential role to transmit useful technological information to farmers. Several were older non-graduates with a strong knowledge power-base in their district, who perceived themselves as 'problem-solvers'. We were asking them to modify their individual adviser role to group facilitator, without offering an equivalent or better reward. As they experienced the process, two advisers realised that a facilitatory role would enable them to establish and facilitate groups to an autonomous stage, then move on to form new groups. They perceived that this would help them retain their jobs threatened by the transfer from government to processor control. In an independent, parallel project, Lambourne and Strachan (pers. comm. 29-4-94) also recognised the dominant influence of dairy advisers and the need to work closely with them to achieve success with dairy farmers in their district.

We also were changing the expected norms for each role. One co-operative adviser was sceptical of the researcher's request to approach farmers outside his normal contact, but did so and their enthusiasm encouraged his participation. Similarly, farmers have learnt to expect answers from advisers, and some resented facilitatory efforts which encouraged them to work on issues themselves. Even official representatives of the farmer organisation challenged the perceived 'invasion' of the researcher (albeit with the approval of the adviser) into the adviser's domain. Some farmers became more interested when they realised that the action-learning process offered a means of compensating for the declining number of advisers. This represented the emergence of a new value with which to judge performance of advisers and the action-learning project.

The role adjustments require changes in the norms which describe appropriate behaviour for those roles. These changing norms threaten traditional values and generate new ones. This dynamic process has taken more time than anticipated.

Analysis III - political analysis. The researcher achieved most progress where he did not threaten traditional power structures. This limited him to two districts and less than eight groups for the first nine months, while others watched. Initially, groups were encouraged to develop and implement action on their own agendas, but other advisers participated when the researcher allowed groups to choose from organisational agendas, as this matched the adviser's programmed work.

Organisations discouraged their staff from co-operating where the group objectives did not match the organisational objectives. This was most apparent when the researcher was appointed without senior executive support, despite strong collaboration at lower and middle-management levels, and strong support from representatives of the Northern Dairy Group. Although consistent with the Extension Strategy Statement (QDPI 1992), action-learning varied from traditional problem-solving approaches favoured by a senior executive.

The cultural analysis of intervention, social relationships and power has highlighted significant constraints to the action learning project. Most of this resistance came not from farmer groups, but people who were threatened in some way by their perception of the alternative 'farmer-driven' approach. Checkland and Scholes stress that the proposed change must be meaningful to participants before it can be culturally feasible.

Logical analysis

The logic-based stream of analysis runs parallel to the cultural stream. Logic-based thinking is the process of choosing relevant systems, describing them as models and using these models to compare with the real-world problem situation. SSM is an iterative, systemic learning process to examine problematic tasks or issues and develop models which generate meaningful debate.

Several systems could be identified in the dairy project, but the cultural analysis suggests that initially, the most important is 'a system to implement the action-learning study'.

> System I: A system to implement the action-learning study.

Elements of the system are represented by the mnemonic 'CATWOE':

> advisers and farmers as primary *clients* (both potentially beneficiaries and/or victims of the study);
>
> researchers, advisers and members of the management team as actors (with interested stakeholders observing);
>
> DRDC as owner, in that it can stop the study; and
>
> a deregulating dairy industry as a given *environment*.

Most importantly, we have a *transformation* from a lack of, to some, knowledge about action learning. This is consistent with the *world-view* of the researchers, NDG and DRDC that the development of alternative systemic methodologies including action research and congruent techniques is desirable and necessary for the dairy industry to adapt effectively to changing environmental circumstances.

A root definition says what the system is. It follows the form of 'a system to do X by Y in order to achieve Z' in a given environment (Checkland and Scholes, 1990:36). Thus,

> A system to implement the action-learning study is a process owned by the DRDC which funds a researcher to introduce some knowledge of action-learning to dairy advisers and groups of farmers, so that they may learn relevant techniques for adapting to a complex, rapidly changing environment. Senior representatives of dairy industry organisations consider it desirable to introduce new techniques to farmers and their advisers so they can achieve sustainable productivity levels.

We can now model what the system *does* (Figure 1). We can generate a range of useful criteria and relevant indicators to monitor progress. Then we can ask how that model reflects the problem situation. Do the stakeholders consider that it has relevance? What systemically desirable and culturally feasible changes are indicated? Does it improve our ability to improve productivity and sustainability? Does it improve the autonomy of the participating farmers in the short term? Does it reflect an effective information flow through the human activity system we have modelled?

As the model does not incorporate these system properties, we need to review our problem situation and construct an improved model from a revised root definition, as an iterative learning process. We need to do this in conjunction with system participants. In fact, management team members and some participants used their own innate criteria to make sense of their observations, and concluded that what they saw was no different to other group activities in their experience. We concluded that the model reflects a weak intervention process which does not meet expectations of stakeholders, so we refined the root definition.

> System II: A system to encourage questioning insight within farmer groups.

Our clients, environment and owner remain the same as for System I, but transformation and world view may change significantly. Consequently, our actors or participants are likely to change. We have shifted from an emphasis on programmed instruction (P) to questioning insight (Q) in Revans (1984) learning formula: $L = P + Q$ (Zuber-Skerritt, 1991:47). This is supported by the world view that creative, lateral thinking techniques will help people to address increasingly complex issues; and that the inherent conceptual ability of most individuals will be enhanced if they interact with concerned others, especially in groups. Our transformation will be from a state of 'not being aware of several appropriate techniques for stimulating questioning insight into complex issues' to one of 'experiencing how to use sets of appropriate techniques which stimulate questioning insight in an exciting, challenging and satisfying way, in order to address complex issues'. As a result, groups are likely to involve new people who can make relevant contributions to address the group's problem situation.

Our new system can be expressed by a root definition:

> 'A system to encourage questioning insight within farmer groups' is a process owned by DRDC and implemented by farmers in conjunction with advisers, researchers and other interested participants, to develop and use sets of appropriate techniques for generating questioning insight in an exciting, challenging and satisfying way to provide meaningful answers to complex issues. These insightful questions will be guided by universal system properties and patterns. This will be achieved by selecting, testing and documenting a range of qualitative communication techniques in sets or modules suited to specific individual and group needs in different agro-ecological environments, seeking new information as required. The participative approach will ensure that the modules provide new ways of encouraging creative enquiry amongst groups of people that want to resolve complex issues for themselves, and consequently learn to adapt to the rapidly changing environment arising from dairy industry deregulation. The problem-solvers and problem-owners believe that creative, stimulating techniques will help people to address increasingly complex issues; and that the inherent conceptual ability of most individuals will be enhanced if they interact with concerned others, especially in groups.

This system can be modelled using the verbs from the root definition (Figure 2). The systemic model is then compared with perceptions of part of the real-world problem situation. How are the differences between the model and the problematic situation addressed by attention to system properties and patterns? Are the changes systemically desirable and culturally feasible? How meaningful do participants find the outcomes generated by the sets of techniques? This may be reflected by the extent to which group participants apply their learning to new, totally different situations (such as domestic issues). How can the socio-economic benefits of these changes be measured in a meaningful way for the system owner?

INTERPRETATION

Let us consider these models as examples of holistic systems. In order to adapt and survive in a changing environment, they need to exhibit properties of emergence and hierarchy, communication and control. We have examined both systemic models at a common hierarchical level, recognising that there are sub-systems of each element considered, and that the models are themselves sub-systems of a larger system. Each hierarchical level can be identified by the presence of emergent properties. Checkland and Scholes (1990:19) propose that 'the concept of emergent properties itself implies a view of reality as existing in layers in a hierarchy'.

What is the emergent property of this systemic enquiry which would not exist without the concept of a 'system to encourage questioning insight within farmer groups'?

> First, the emergent property must be *culturally feasible*. We have described some of the difficulties which have arisen during the intervention, associated with social and political adjustment to change. This change needs to be negotiated within existing cultural parameters, over time. The study has demonstrated that changes perceived as 'culturally desirable' by organisational representatives will not be adopted before the clients are satisfied that their socio-economic benefit exceeds their cost, and the changes are congruent with the roles, norms, values and power structure of the community.
>
> Second, the emergent property must be *systemically desirable*. It must offer an equitable advantage to the whole system. This may be expressed as improved stability, productivity, sustainability, and/or autonomy of the system in terms of space, time, flow (of information, energy or cash) and/or decision-making.

We propose that 'empowerment' is an important property emerging from this systemic study. Individuals are learning that they can effect desirable changes on their own terms and conditions, by broadening their appreciation of the socio-economic system in which they live. This is an intangible outcome of the action-learning project. Their empowerment will be expressed as participants change their roles to problem-owner/ problem-solver, as distinct from problem-owner/ client, or simply client. As group members adapt their roles, new norms will develop to describe appropriate behaviour, and values will determine acceptability of that behaviour. Empowerment also will be expressed as farmers find access to information, as distinct from being dependent on intermediaries who derive power from their role. The action-learning process encourages questioning insight, which influences perceptions of the problem situation and enables new knowledge to be accessed. As cultural influences allow, system stakeholders are likely to make (previously unsolicited) resources available to participants. Farmers also will be empowered by their membership of groups which have access to information: telecottages are one possible outcome of the project.

If empowerment is to be an effective emergent property within the hierarchical level we have considered, it will require communication and control to enable the system to adapt to environmental shocks. Improved communication within and between hierarchical systems can be monitored for its efficacy and efficiency. System II requires more rigorous evaluation to support

FIGURE 1. A system to implement the action learning study.

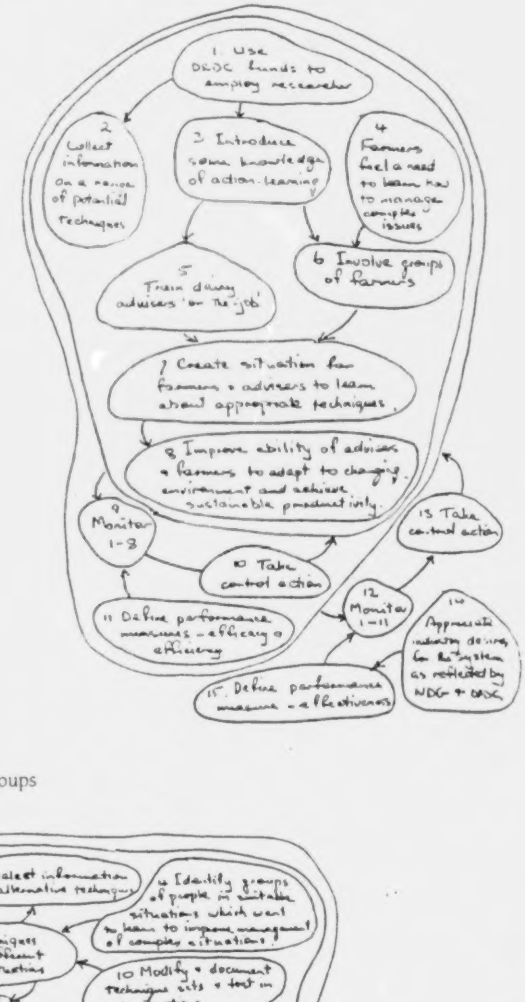
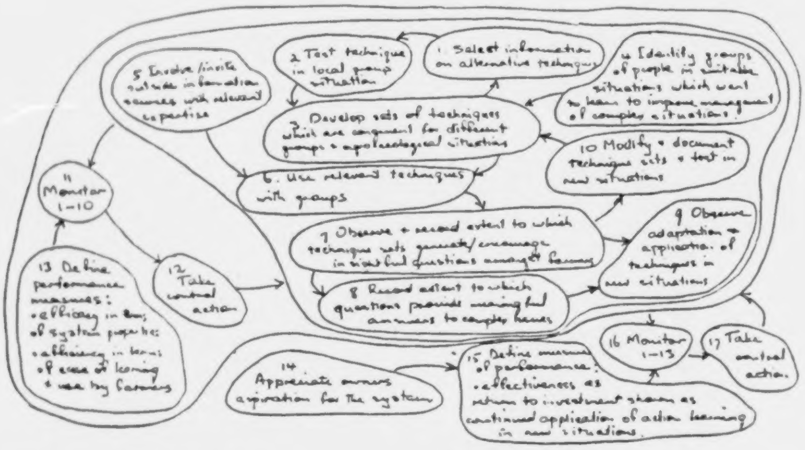

1. Use DRDC funds to employ researcher
2 Collect information on a range of potential techniques
3 Introduce some knowledge of action-learning
4 Farmers feel a need to learn how to manage complex issues
5 Train dairy advisers 'on the job'
6 Involve groups of farmers
7 Create situation for farmers + advisers to learn about appropriate techniques
8 Improve ability of advisers + farmers to adapt to changing environment and achieve sustainable productivity.
9 Monitor 1-8
10 Take control action
11 Define performance measures - efficacy + efficiency
12 Monitor 1-11
13 Take control action
14 Appreciate industry desires for the system as reflected by NDG + DRDC
15. Define performance measure - effectiveness

FIGURE 2. A system to encourage questioning insight amongst farmer groups


1. Select information on alternative techniques
2 Test technique in local group situation
3 Develop sets of techniques which are congruent for different groups + agroecological situations
4 Identify groups of people in suitable situations which want to learn to improve management of complex situations
5 Involve/invite outside information sources with relevant expertise
6. Use relevant techniques with groups
7 Observe + record extent to which technique sets generate/encourage insightful questions amongst farmers
8 Record extent to which questions provide meaningful answers to complex issues
9 Observe adaptation + application of techniques in new situations
10 Modify + document technique sets + test in new situations
11 Monitor 1-10
12 Take control action
13 Define performance measures: • efficacy in terms of system properties • efficiency in terms of ease of learning + use by farmers
14 Appreciate owners aspiration for the system
15 Define measures of performance: • effectiveness as return to investment shown as continued application of action learning in new situations.
16 Monitor 1-13
17 Take control action.

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empowerment. Within the system, researchers, farmers and facilitative advisers are generating criteria to monitor change in terms of system properties and patterns, both within and between groups. These criteria aim to monitor productivity or sustainability changes amongst group farms relative to non-group farms, or seek equitable information flow amongst system participants. This is difficult for researchers, but participating farmers can identify performance indicators that are meaningful to them. At the system boundary, researchers and project managers are monitoring the system's effectiveness in terms of socio-economic returns to research investment. The outcomes of these evaluative processes need to be communicated throughout the system to enable adaptation and survival.

As the empowerment process unfolds, participants will learn new communication skills and ways of managing their own environment more effectively. They will broaden their mind-sets to apply inherent skills within a knowledge system in order to find satisfactory outcomes to newly emerging problems. They will not need facilitators: they either will have the necessary skills or know where and how to get them. They will have learnt how to adapt existing skills to manage new situations, and the action learning project will be judged as successful.

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PHILIPPINE MAIZE FARMERS ASSESS TECHNOLOGY IN TERMS OF THEIR AGRO-ECOLOGICAL ENVIRONMENT: REASONS FOR NON-ADOPTION

J.D. Intong and B. Frank — Australia

ABSTRACT

This study considered the adoption of a maize technology package (MTP) in relation to the agro-ecological attributes (AGECO) of a plain (PV) and an undulating upland (UV) village in Southern Philippines. Eighty two farmers from PV and 36 farmers from UV were selected by stratified random sampling. Adoption behaviour was based on the level ($kg\ ha^{-1}$) of high yielding varieties (HYV) seed, chemical fertilisers, and lime applied in 1991. The Statistical Analysis System (SAS, 1988) was used in the analysis of the data.

The farmers in PV and UV perceived significantly different values of the AGECO of their villages and showed significantly different adoption behaviour towards the MTP. A strong relationship was found between perceived value of AGECO and adoption of the MTP among farmers in PV but not among farmers in UV. High adoption rates of the MTP were associated with high perceived value of soil suitability, maize farming preference, income, employment, sufficiency in food supply, and inclination to work hard. Low adoption rates were attributed to inadequate water supply, unstable HYV yields and prices of input/output, and decline in soil fertility. Results of the study support the notion that adoption of technology is a function of perceived ecological attributes of an agricultural system.

INTRODUCTION

Adoption of technology is viewed as essential to agriculture-led development strategy in Third World countries. Technological advances were used in anti-poverty programs (Campbell, 1990), to stimulate productivity (Gee, 1981) and economic growth (Link, 1987), to create employment and raise income levels (Dichter, Husbands, Areson & Frey, 1988; Preece, 1989). These successes supported the notion that technology was good, desirable and suitable for adoption by all members of a social system (Rogers, 1983). As a result of this notion, blame for non-adoption of a technology often was attributed to farmers who were perceived as traditional and 'laggards' (Rogers, 1983) by technologists.

However, specific forms of agricultural technology need to be related to a farmer's physical environment. Coughenour (1984, p 15) defined agriculture as a process of transaction between farmers and environment in order to extract the means of sustenance. Non-adoption of modern technology can be attributed to a mis-match between laboratory and farm environments, as modern technology is often developed in a human-modified physical environment (Castillo, 1968). Prior to the 80's, agricultural relationships between people and their environment had received little attention from sociologists (Perez, 1979). More recently, farmers' adoption behaviour has been shown to have an ecological basis (Gartrell & Gartrell, 1980; Ashby, 1982; Gartrell, 1983; and Rigg, 1985). Rogers (1983) suggested that compatibility of a technology with previously introduced ideas and needs of the social system often did not guarantee its adoption.

More than half (56%) of the Philippine national territory is hilly and mountainous (WB, 1989). The need to understand relationships between technology and farming environments becomes more critical as slopelands are converted into agricultural lands as a result of internal migration (Paya, et al., 1992). Concern about sustainable maize production on hilly lands has prompted this comparative study.

This paper postulates that the important relationship between technology and environment has been undervalued in programs to promote agricultural production in the Philippines. In particular, adoption of maize technology is crucial to the country's aim for agricultural development. Maize (locally known as *mais*) is the second staple food among filipinos and a good substitute for rice, especially during lean periods. As well, maize constitutes 20% of livestock feed. In spite of several maize production programs, the

Philippines has been a regular importer of maize since the 1960s. A recent economic analysis of the maize industry revealed that economically, the government benefits most by growing maize domestically rather than by importing it (Gonzalez & Perez, 1991).

Specifically, this paper analyses the relationship between ecological attributes of a plain and an undulating upland village in Southern Philippines, and the adoption of a recommended maize technology package (MTP). The package includes high yielding varieties (HYV) of maize, nitrogen, phosphorus and potassium fertilisers (NPK fertilisers) and lime practices. It examines ways that adoption behaviour of farmers in these two upland villages is influenced by the practices in the MTP, and the farmers' perceived value of agro-ecological attributes (AGECO) surrounding their villages. The study also discusses the effects of the use of the MTP on equity and poverty issues in the villages.

LOCALE OF THE STUDY

The field study was conducted in the township of Malaybalay, Bukidnon province, Mindanao Island, Southern Philippines (Map 1). Mindanao accounted for 60% of national maize production in 1970-1990 (Gonzales & Dimaranan, 1991). Bukidnon, a landlocked province on an extensive plateau of rolling grasslands (Edgerton, 1982), is one of the major maize-producing provinces on the island. The exploitation of hilly lands is a serious problem because 84% of Bukidnon's agricultural area is located on sloping uplands (Agricultural Profile, 1990).

Most of Bukidnon province soils originated from igneous and metamorphic rocks, with occasional limestone caps (Mariano, Aguas & Yniguez, 1955). The *adtuyon* soil type found extensively on the plateau is suitable for maize, rice, cassava, *camote* (sweet potato), abaca, cacao and coffee production. Continuous cropping however, has resulted in soil erosion and increased acidity of the soil (Pava, et al., 1992). As the widespread occurrence of acid soils has limited the productivity of maize farming in the province, the township of Malaybalay has been selected as a site for an Australian Centre for International Agricultural Research (ACIAR) project designed to examine ways of ameliorating the effects of acid soils (Project Document 8904).

The township of Malaybalay experiences the fourth climate type in the Philippines (Municipal Agricultural Profile, 1990). The town's average annual rainfall of 2,800 mm is well distributed throughout the year, with 63% of total rainfall occurring during the months of May to October. Its climate is relatively cool throughout the year with a mean annual temperature ranging between 16.8 °C and 31 °C.

Two neighbouring but topographically different maize-producing villages within the township of Malaybalay were selected as the locale of the study: an undulating upland village (UV) in the north and a plain upland village (PV) in the south. The characteristics (*Baranggay Profile*, 1992) of these two villages, and rates recommended for the MTP are presented in Table 1.

Table 1. Characteristics of PV and UV.

Characteristics	PV	UV
Percentage flat lands	64%	41%[a]
Soil pH	5.4	5.1
Maize technology practices[b](kg ha⁻¹)		
High Yielding Varieties seed	18	18
Nitrogen fertiliser	90	100
Phosphorus fertiliser	25	60
Potassium fertiliser	30	60
Lime[d]	2,000	2,000

[a] with 5% mountainous terrain

[b] rates recommended by the Department of Agriculture (DA)

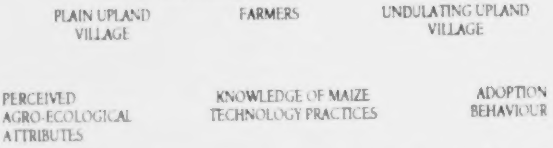
[c] rate recommended per cropping season

[d] rate recommended per three cropping seasons

METHODOLOGY

The relationship between variables in the study is shown in Figure 1. The study hypothesised that adoption behaviour is independent of perceived agro-ecological attributes (AGECO) of a village. Specifically, three null hypotheses were tested in the study: there was no difference between PV and UV farmers in their perceived value of the AGECO of their villages; there was no difference in the adoption (kg ha⁻¹) of HYV seed, NPK fertilisers and lime between farmers in PV and UV; and there was no relationship between perceived value of AGECO and adoption behaviour of farmers in the two villages.

Figure 1. A model showing relationships between variables used in the study.


PLAIN UPLAND VILLAGE
FARMERS
UNDULATING UPLAND VILLAGE
PERCEIVED AGRO-ECOLOGICAL ATTRIBUTES
KNOWLEDGE OF MAIZE TECHNOLOGY PRACTICES
ADOPTION BEHAVIOUR

In order to test relationships in the conceptual model, 82 farmers from PV and 36 farmers from UV, representing 32% and 38% respectively of all maize households in both villages, were selected by stratified random sampling. They were interviewed using a questionnaire which included 13 statements about the value of AGECO of the natural physical environment, the village population and the MTP (Table 2). Respondents were asked to rate the AGECO of their village from 1 to 5 (5 being the highest score).

Table 2. Agro-ecological attributes used in the study.

Agro-ecological attributes	Perceived value (1 - 5 scale)
Natural physical environment:	
The soil in the village was ... suitable for maize farming.	less - - - - - more
The village had a supply of water for maize production.	inadequate - - - - - adequate
Village people:	
The village people preferred maize farming ... than other enterprise	less - - - - - more
Maize Technology Package (MTP):	
The yield of HYV maize in the village was ... stable.	less - - - - - more
The farmers were ... affected by input/output prices due to MTP	less - - - - - more
There were ... markets for maize products	insufficient - - - - - sufficient
The MTP ... unemployment in the village	reduced - - - - - increased
The MTP ... gap between rich and poor	reduced - - - - - widened
The MTP ... income of farmers	reduced - - - - - increased
The MTP ... farmers to work harder. encouraged	discouraged -
Soil fertility had ... as a result of MTP	declined - - - - - improved
The MTP ... food supply in the village	reduced - - - - - improved
The MTP was ... resistant to attacks of insects and pests	less - - - - - more

Application of HYV seed of maize, and NPK fertiliser practices were monitored in a one-hectare maize field during one wet and dry season in 1991. Lime use was measured based on the total amount applied to a one-hectare maize field in the same year. Adoption behaviour towards the MTP was based on crude rate of adoption and intensity of adoption. Crude rate of adoption was based on the number of farmers in each village who adopted the MTP in 1991. Intensity of adoption of the MTP was based on the level (kg ha-1) of HYV seed, NPK fertilisers and lime applied in 1991 in relation to rates recommended by the Department of Agriculture (DA). Survey results were discussed with respondents in a follow-up meeting to enable revision and additional comments.

The Statistical Analysis System (SAS, 1988) was used to analyse the findings of the study. Statistical tests included Maximum

Likelihood Estimate (MLE), Chi-square test, T-test and Wilcoxon rank-sum test. Cluster analysis classified groups of respondents within each village with similar structures among sets of variables. Clusters with very a low number of cases were merged with other clusters when considered reasonable; otherwise they were excluded from the analysis. MLE analysed the asymptotic behaviour of variables with small sample sizes by maximising the probability of the relationship which already occurred (Cramer, 1986). Wilcoxon rank-sum test (or Mann-Whitney test) (Conover, 1980), and T-test were used to test whether the distribution of means had the same location across farmers in PV and UV.

RESULTS

Perceived Value of AGECO in PV and UV

Results of MLE and Chi-square test indicate a highly significant difference ($p < .0001$) in perceived value of AGECO between PV and UV farmers as described by the clusters (Table 3). The null hypothesis (1) that there was no difference in perceived value of AGECO between PV and UV farmers as described by the clusters is rejected.

Table 3. Differences in perceived value of AGECO between PV and UV farmers as described by the clusters.

Villages	Results of cluster analysis	
	Cluster 1	Cluster 2
PV (N=79)	10%	90%
UV (N=35)	40%	60%
MLE	68.25***	
Chi-square test	13.92***	

*** p < .0001

Cluster analysis identified two groups of farmers within PV and UV. Mean and standard deviation (*SD*) in each cluster by village are shown in Appendix A. Graphic presentations of perceived value of AGECO among PV and UV farmers as described by the clusters are shown in Figure 2.

Based on mean score, data in Table 4 show significant differences between PV and UV farmers in 10 of the 13 AGECO, as manifested in the results of the Wilcoxon rank-sum test. PV farmers regarded their soils as highly favourable for maize farming, which they preferred over other activities, but considered that their water supply was most inadequate. They considered that the MTP increased their income substantially; improved food supply reasonably, reduced unemployment substantially and provided a strong incentive for them to work as maize farmers. They felt that MTP contributed to a slight decline in soil fertility, that maize yields were slightly unstable, and that they were highly affected by prices of input/output.

On the other hand, UV's water supply was better than PV (although not excellent), and UV farmers felt that MTP had increased unemployment reasonably, which provided less incentive to work as maize farmers.

Figure 2. Perceived value of AGECO between PV and UV farmers as described by the clusters.

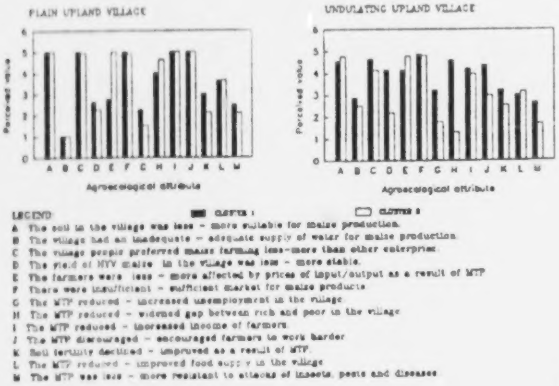


Table 4. Differences between PV and UV farmers in perceived value of AGECO of each village.

Agro-ecological attributes	PV	UV	Wilcoxon rank-sum test
Suitability of the soil	5.00 ± 0.00	4.69 ± 0.67	16.67***
Adequacy of water supply	1.00 ± 0.00	2.66 ± 1.03	88.67***
Maize farming preference	4.95 ± 0.27	4.34 ± 0.68	38.64***
Stability of yield	2.30 ± 1.18	2.97 ± 1.36	6.27*
Affect of input/output prices	4.77 ± 0.72	4.51 ± 0.74	7.93**
Sufficiency of market for output	4.92 ± 0.50	4.82 ± 0.51	3.63
Unemployment	1.58 ± 0.72	2.34 ± 1.16	12.64**
Gap between rich and poor	4.61 ± 0.88	4.63 ± 0.81	0.003
Farm income	5.00 ± 0.00	4.06 ± 0.87	63.70***
Inclination to work	5.00 ± 0.00	3.51 ± 1.29	77.55***
Soil fertility	2.22 ± 1.14	2.80 ± 1.21	4.57*
Food supply	3.65 ± 1.67	3.09 ± 1.20	5.48*
Resistance to pests and diseases	2.15 ± 1.16	2.06 ± 0.94	0.13

* p < .05
** p < .005
*** p < .0001

Adoption of the MTP among Farmers in PV and UV

Results of MLE and Chi-square test show a highly significant difference ($p < .0001$) between PV and UV farmers in the adoption of the MTP as described by the clusters (Table 5). The null hypothesis (2) that there was no difference between PV and UV farmers in the adoption of the MTP as described by the clusters is rejected.

Table 5. Difference in the adoption of the MTP between farmers in PV and UV as described by the clusters.

Villages	Result of cluster analysis			
	Cluster 1	Cluster 2	Cluster 3	Cluster 4
PV (N=82)	48%	13%	13%	26%
UV (N=36)	31%	13%	39%	17%
MLE		35.59***		
Chi-square test		20.04***		

*** p < .0001

Four groups of farmers within PV and UV were identified by cluster analysis. Mean and SD of each cluster by village are shown in Appendix B. Graphic presentations of the adoption of the MTP in PV and UV as described by the clusters are shown in Figures 3 and 4.

As shown in Figure 3, almost half of farmers in PV (48%, cluster 1) adopted recommended rates (kg ha^{-1}) of HYV seed, and more-than-recommended rates of NPK fertiliser (considering *SD*) and lime practices during the wet and dry seasons in 1991. More than a tenth of PV farmers (13%, cluster 3) applied recommended rates (kg ha^{-1}) of HYV seed and NPK fertiliser (considering *SD*) during the wet season, but applied negligible amounts during the dry season.

In Figure 4, 31% (cluster 1) of farmers in UV applied recommended rate of HYV seed; while 44% (clusters 1 & 2) applied recommended rates of N fertiliser (considering *SD*) and lime during the wet and dry seasons in 1991.

As regards crude rate of adoption, data in Table 6 show that a significantly higher percentage of UV farmers adopted the MTP in 1991 than PV, except for HYV seed practice. This suggests that UV farmers used the traditional variety tiniguib but applied fertilisers to their farms. In relation to rate recommended by the Department of Agriculture (DA), data in Table 7 indicate that farmer-adopters in PV applied significantly higher rates (kg ha^{-1}) of NPK fertilisers and lime than UV farmers. Intensity of adoption of N fertiliser and lime practices in PV was more-than-recommended rates. In both villages, farmer-adopters of HYV seed had applied the rate recommended by the DA. A comparison of data in Tables 6 and 7 shows that when PV farmers decided to adopt the MTP, they applied higher rates of the technology than UV farmers. This suggests that PV farmers invested more resources in MTP than UV farmers. The data also indicate cases of underadoption of NPK fertiliser practices, which was more pronounced among UV farmers than among PV farmers.

Figure 3. Adoption of the MTP among farmers in PV as described by the clusters.

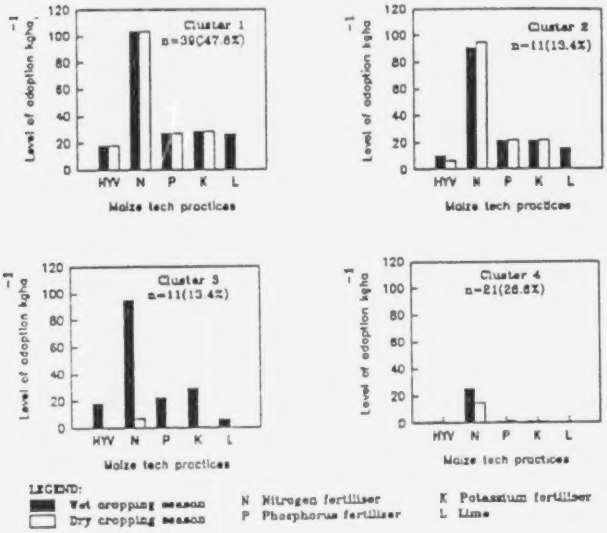
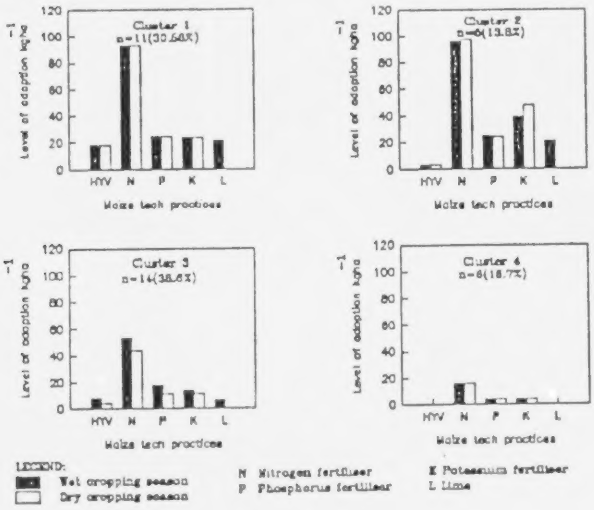


Figure 4. Adoption of the MTP among farmers in UV as described by the clusters.



Note: Scale of lime application was reduced by a hundredth (e.g. lime application in cluster 1 in PV was 2,000 kg ha^{-1}).

Table 6. Crude rate of adoption of the MTP among farmers in PV and UV in 1991.

Maize technology practices		Crude rate of adoption				t-value
		PV		UV		
		No. of adopters	Percentage	No. of adopters	Percentage	
HYV seed	wet	57	70	18	50	2.04*
	dry	43	52	15	42	1.07
N fertiliser	wet	70	85	34	94	1.40
	dry	57	66	34	94	3.06**
P fertiliser	wet	61	74	33	92	2.17*
	dry	53	65	31	86	2.41*
K fertiliser	wet	60	73	32	89	1/91
	dry	51	62	31	86	2.65*
Lime		50	61	20	56	0.55

* $p < .05$. ** $p < .005$.

Table 7. Intensity of adoption of the MTP among farmer-adopters in PV and UV.

Maize technology practices		Intensity of adoption (in %)		t-value
		PV	UV	
HYV seed	wet season	100	100	–
	dry season	100	100	–
N fertiliser	wet season	116	69	7.2***
	dry season	119	71	6.6***
P fertiliser	wet season	42	33	3.5**
	dry season	42	31	4.4***
K fertiliser	wet season	62	35	5.3***
	dry season	59	35	5.1***
Lime		127	112	0.9

** $p < .005$. *** $p < .0001$.

Relationship between Perceived Value of AGECO and Adoption Behaviour of Farmers in PV and UV

The MLE demonstrates a highly significant association ($p < .0001$) between perceived value of AGECO and adoption of the MTP among farmers in PV as described by the clusters, but not among farmers in UV (Table 8). The null hypothesis (3) that there was no relationship between perceived value of AGECO and adoption behaviour of farmers as described by the clusters for PV is rejected but supported for farmers in UV.

Table 8. Relationship between perceived value of AGECO and adoption behaviour of farmers in PV and UV as described by the clusters.

AGECO	Adoption behaviour				MLE
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	
PV (N=79)					
Cluster 1 (n=8)	–	–	13%	87%	47.35***
Cluster 2 (n=71)	54%	15%	13%	18%	
UV (N=35)					
Cluster 1 (n=14)	50%	14%	21%	14%	7.02
Cluster 2 (n=21)	19%	14%	48%	19%	

*** $p < .0001$

Data in Table 8 suggest that PV farmers showed a bi-modal behaviour pattern towards the MTP. That is, PV farmers adopted the MTP where they perceived favourable agro-ecological conditions, but chose not to adopt where conditions were less favourable. This is reflected in cluster 3 of Figure 3, where PV farmers used recommended rates of HYV seed, and NPK fertiliser practices during the wet season. Conversely, during the dry season when water was most limiting, PV farmers used negligible amounts of MTP. In general, there was a higher percentage of PV farmer-adopters during the wet season than the dry season (Table 6).

DISCUSSION

Perceived Farming Environment and Adoption of the MTP in Southern Philippines

Findings of the study indicate that PV farmers adopted higher levels (kg ha^{-1}) of NPK fertiliser and lime practices in 1991 than UV farmers, which resulted in higher maize yields and income. In contrast, there were more UV farmers who adopted the MTP but applied low levels ($kg\ ha^{-1}$) of the practices than PV farmers, which resulted in low maize yields and income. Hilly lands posed constraints on its use for agricultural production. Cultivation of hilly lands resulted in the decline of productivity and stability (Chan 1981) due to soil erosion (So & Woodhead, 1987), which caused high risk in upland farming (WB, 1989).

Moreover, PV farmers were concerned about the inadequacy of water supply in the village for maize production, as rainfall in the province begins to dwindle during the second cropping season (dry season). This is reflected in a higher percentage of PV farmer-adopters during the wet season than the dry season in 1991 (Table 6). The relatively high perceived value of adequacy of water supply in UV could be attributed to the Water System Project of the Benedictine monks (a religious order), with assistance from the 'Presidential Management on Special Projects', which was primarily intended for household needs.

Inadequacy of water supply affects maize productivity. In her study among maize farmers in Central Philippines, Pascual (1971) found that HYV seed was easily affected by short dry spells. Loss in maize yield due to unfavourable weather condition was found to be higher than loss caused by pests and diseases (Raper and Kramer 1983), as maize plants are sensitive to water stress and flooding (Norman, Pearson & Searle, 1984). Under rainfed condition, Patanothai and Ong (1987) indicated that small farmers take high risks to invest in high cash input technology. These findings show that the MTP depends on an adequate water supply, which suggests a need for irrigation facilities in the introduction of the technology. These results support the findings of Castillo in 1968. Castillo considered that the lag in the development of physical environment in the Philippines (e.g. irrigation and drainage) has prevented farmers deriving the optimum use and full benefits from modern technology.

Other factors significantly associated with adoption of MTP showed that PV farmers were older, had larger maize farms and had access to inputs and credits. Looking closely at these variables, it could be deduced that better access to inputs and agricultural credits was due to favourable farming environment in PV which could support agricultural credits.

Overall, findings of the study suggest that PV provided better farming environment for MTP resulting in higher maize production than UV. Ashby (1982) explained that an agricultural technology needs to be suitable to farmer's environment, who may perceive it as either an 'opportunity' or a 'constraint' to production (Coughenour, 1984, p.4).

Relationships between physical environment and adoption of agricultural technology were also reported in many studies. Six studies conducted by the Centro Internacional de Mejoramiento de Maize y Trigo (CIMMYT) and reviewed by Perrin and Winkelmann (1976) found that differences in soil, climate and water availability provided the most pervasive explanation for the differential adoption behaviour of farmers. Jansen (1988) observed that agroclimatic and soil differences influenced adoption of modern cultivars more than the dissimilarities in infrastructures.

Maize Technology Adoption: Implications to Poverty and Equity Issues in Southern Philippines

In 1979, Castillo described the role of technology in Philippine national development:

> In the process of looking for a better quality of life for our people, in attempting to solve the problems of poverty, unemployment and inequality and in trying to bridge the gap between the rural and urban sectors of society, technology .... is used as a major instrument for achieving our development goals (p.195).

This technology-driven goal of alleviating poverty through increased and equitable distribution of income was echoed in the Philippine Development Plan for 1987-1992 (Villanueva, Valmayor & Tiamzon, 1989). In the province of Bukidnon, the Department of Agriculture planned to optimise farmers' real income in order to alleviate poverty and foster social justice and equity in the province (Agricultural Profile, 1990).

Findings of the study suggest that the MTP contributed to an uneven distribution of income among farmers in PV and UV. PV farmers had higher maize yields and income than UV farmers. They felt that MTP had increased their income substantially, reduced unemployment and improved food supply in the village reasonably. These imply that PV farmers tend to benefit more economically from MTP than UV farmers.

Dissimilarities in infrastructures in the two villages tend to contribute to equity and poverty issues. PV had a market structure (Baranggay Profile, 1992) with private financiers who catered to the financial needs of 67% of the farmers. In addition, a National Food Authority (NFA) warehouse which offers higher output prices to farmers compared to private merchants is located in PV. However, budget limitations had constrained the NFA to procure more agricultural products of farmers (Perez & Dimaranan, 1991), especially during peak selling periods.

On the other hand, instability of input/output prices could be attributed to the suki system of credit-market tie-up in PV. In the *suki* system, inputs are advanced by a private merchant (*suki*) on credit well above the cash price, with the condition of selling the crop to the *suki* at harvest time.

As a whole, the presence of private financiers in PV had contributed to both access to inputs and credits and instability in prices of input/output which caused problems in the adoption of the MTP. Nevertheless, PV farmers had better access to inputs, credit and market which enhanced propensity to invest in the MTP than UV farmers.

Issues on poverty and equity raised in this study collaborated the findings of Morooka (1985) on the impact of technology on economic viability and social justice in a Philippine village. Morooka found that technology transfer has created a gap between depressed and developed areas in the village. Conversely, Perez (1988) found that modern technology in the Philippine maize industry has brought welfare gains to the society: stability in prices, increased import substitution and increased labour productivity. The increase in yield brought about by the use of HYV seed of maize tends to increase demand for labour, particularly at harvest time. However, the introduction of farm mechanisation in maize farming could displace human labour.

Poverty and equity issues brought about by the introduction of modern technology have been observed in other countries. In Bangladesh, Greeley (1982) found that technical change in rice processing threatened the livelihood of the poorest rural households, particularly women. McNamara (1987) reported that economic growth in developing countries has benefited mainly the upper 40% of the population. In 1990, a report of the United Nation's Economic and Social Commission for Asia and Pacific indicated that growth-oriented strategies in developing countries failed to eradicate unemployment, poverty and malnutrition.

CONCLUSION

Results of the study indicate that adoption of a technology has an ecological basis. The results support the notion that adoption of agricultural technology is a function of ecological attributes of an agricultural system. This suggests that agricultural research should be based on ecological attributes by involving farmers in the development of an agricultural technology. This would ensure that the technology is more suitable and appropriate, with a consequent increase in its diffusion throughout the intended agro-ecological system.

Furthermore, the data indicate issues of poverty and equity arising from the introduction of the maize technology package in PV and UV. Dissimilarities in infrastructures in both villages tend to contribute to poverty and equity problems. The government needs to improve market and credit infrastructures, which include both formal (the NFA) and non-formal sources (private financiers) in order to stabilise prices of input and output. Success of a modern technology should be judged not only by its adoption rate but on how it solves the problem of poverty and equity in an agricultural system.

Results of this study open potential areas for future research. A quantitative measurement of the physical environment of a farming system and its relationship with adoption of an agricultural technology could reinforce perception results of the present study. In addition, a long term study of the socio-economic and environmental effects is needed to investigate sustainability and equitability of the results of this modern maize technology in Southern Philippines.

Appendix A. Mean and *SD* in perceived value of AGECO among PV and UV farmers as described by cluster analysis.

Agro-ecological attributes	PV (N=79)			UV (N=35)		
	Cluster 1 (10%)	Cluster 2 (90%)	*F* value	Cluster 1 (40%)	Cluster 2 (60%)	*F* value
Suitability of the soil	5.00 ± 0.00	5.00 ± 0.00	0.00	4.57 ± 0.76	4.76 ± 0.62	0.66
Adequacy of water supply	1.00 ± 0.00	1.00 ± 0.00	0.00	2.86 ± 1.23	2.52 ± 0.87	0.88
Maize farming preference	5.00 ± 0.00	4.94 ± 0.28	0.30	4.64 ± 0.63	4.14 ± 0.65	5.03*
Stability of yield	2.63 ± 1.06	2.27 ± 1.94	0.66	4.14 ± 0.77	2.19 ± 1.08	34.14***
Affect of input/output prices	2.75 ± 0.71	5.00 ± 0.00	800.77***	4.14 ± 0.86	4.76 ± 0.53	6.84*
Sufficiency of market for outputt	5.00 ± 0.00	4.92 ± 0.53	0.20	4.86 ± 0.36	4.81 ± 0.60	0.07
Unemployment	2.25 ± 1.04	1.51 ± 0.65	8.20*	3.21 ± 1.31	1.76 ± 0.63	20.76***
Gap between rich and poor	4.00 ± 1.07	4.65 ± 0.85	4.40*	4.59 ± 0.80	4.67 ± 0.84	0.58
Farm income	5.00 ± 0.00	5.00 ± 0.00	0.0	4.21 ± 1.05	3.95 ± 0.74	0.75
Inclination to work	5.00 ± 0.00	5.00 ± 0.00	0.0	4.36 ± 0.63	2.95 ± 1.32	13.62**
Soil fertility	3.00 ± 0.00	2.12 ± 1.17	4.40*	3.21 ± 1.63	2.52 ± 0.75	2.90
Food supply	3.63 ± 1.19	3.66 ± 1.73	0.0	3.00 ± 1.47	3.14 ± 1.01	0.12
Resistance to pest and diseasies	2.50 ± 0.93	2.11 ± 1.18	0.81	2.64 ± 1.08	1.67 ± 0.58	12.07**

Appendix B. Mean and *SD* in the adoption of MTP among PV and UV farmers as described by cluster analysis.

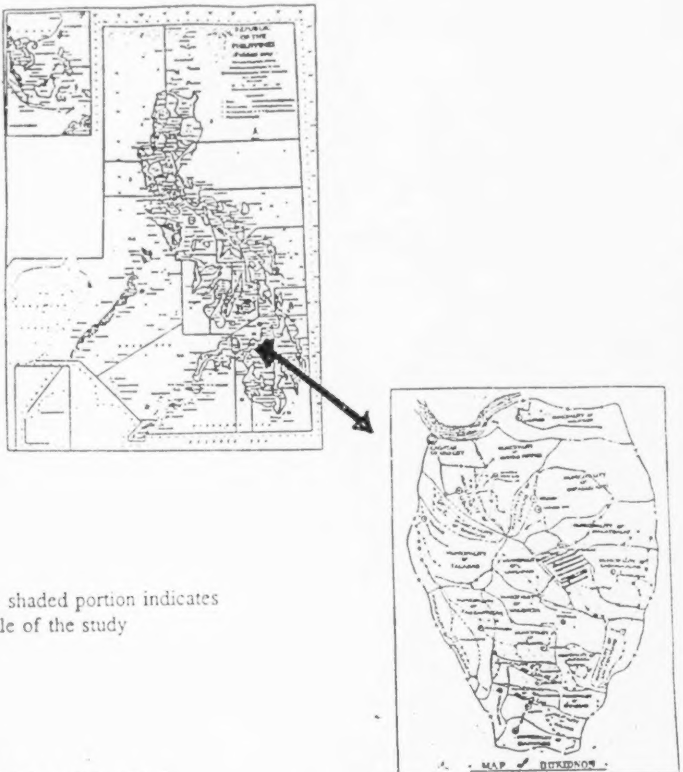
Maize technology practices	PV (N=82)					UV (N=36)				
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	*F* value	Cluster 1	Cluster 2	Cluster 3	Cluster 4	*F* value
HYV seed wet season	18 ± 0.0	10 ± 9	18 ± 0.0	0.9 ± 4	96.79***	18 ± 0.0	4 ± 8	8 ± 9	0.0 ± 0.0	12.04***
dry season	18 ± 0.0	7 ± 9	2 ± 5	0.0 ± 0.0	182.89***	18 ± 0.0	4 ± 8	4 ± 8	0.0 ± 0.0	18.90***
N fertiliser wet season	103 ± 19	91 ± 37	95 ± 14	26 ± 33	42.91***	93 ± 15	96 ± 33	53 ± 11	16 ± 15	35.02***
dry season	103 ± 19	94 ± 25	7 ± 16	15 ± 31	99.42***	93 ± 15	97 ± 35	44 ± 26	16 ± 15	21.85***
P fertiliser wet season	27 ± 3	22 ± 9	22 ± 5	0.7 ± 3	164.77***	25 ± 7	25 ± 8	18 ± 11	4 ± 3	8.11**
dry season	27 ± 3	22 ± 6	0.6 ± 2	2 ± 5	266.62***	25 ± 7	24 ± 6	12 ± 7	4 ± 3	18.12***
K fertiliser wet season	28 ± 10	22 ± 9	29 ± 19	0.7 ± 3	36.44***	24 ± 6	39 ± 10	14 ± 7	4 ± 3	27.42***
dry season	28 ± 10	22 ± 6	0.6 ± 2	0.7 ± 3	77.89***	24 ± 6	48 ± 25	12 ± 7	4 ± 3	20.54***
Lime	2661 ± 1367	1540 ± 1452	623 ± 822	0.0 ± 0.0	28.40***	2091 ± 1683	2120 ± 1448	657 ± 915	0.0 ± 0.0	5.76**

* $p < .05$

** $p < .005$

*** $p < .0001$

MAP 1 A national map of the Philippines showing the geographical location of the plain and undulating upland villages.



Legend: shaded portion indicates the locale of the study

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COMMUNICATE OR PERISH: GENDER ISSUES IN FAMILY FARMING

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ABSTRACT

In spite of global trends toward corporate agriculture, the family farm has shown considerable resilience in Australia. Increasingly, as farm enterprises have shed staff, the labour of wives of farmers has become critical to the continuing viability of the family business. Both partners require management education if farmers are to adjust successfully to changing circumstances. Forms of distance education are needed which acknowledge the changed circumstances of farming families.

The Rural Management Development Centre (RMDC) offers education and training in farm business management. Its experience suggests that owner managers now have little time for continuing education, and traditional attitudes to gender roles mitigate against the empowerment of women to fulfil their potential contribution to decision making.

To address such problems, in 1993 the authors gained a QUT Faculty of Education research grant to study the educational needs and leadership potential of rural women in Queensland. Findings are presented which indicate that enhanced interpersonal communication within the family unit is an essential aspect of successful adjustment.

INTRODUCTION

Adjustment strategies and needs of family farmers

The farm sector in Australia has been one of the most exposed to international economic pressures of any in the developed world, but over the past decade most of the range of support mechanisms have been removed and replaced by a policy of self reliance. As a result, Australia is now faced with the need to develop unique solutions to the problems created. Three kinds of responses to these circumstances appear to be developing.

(1) *Strong family farms.*

By contrast to the rest of the developed world, where large corporate enterprises are basically farming subsidies, in Australia, there appears to have been a strengthening of the already strong family farm units. These units are generally diversified into several rural industries, and off farm, into stocks, financial instruments and real estate.

Whereas the corporate structure does not lend itself to variability between seasons, and does not have the flexibility and long term determination to survive the longer commodity price cycles, the family, with diversified investment, provides both strength and flexibility.

(2) *Innovative management*

As well as the strong, diversified family farm units, some family farms have survived and prospered against the odds. These are operated by 'smart' managers, who have recognised opportunities, slashed costs, minimised risk, and learned how to use the remaining support systems. Many such farmers will survive, and some will join the ranks of the strong family farms within one generation. Others will take the capital accumulation and leave agriculture.

One feature of this group is the involvement of both spouses in the management of the business, and the recognition of the contributions of both. In addition, these farms are generally supported, at least in crisis periods, by income generated by the wife in paid employment off the farm.

(3) *Departure from agriculture as full time occupation*

For many of the current farm units, there is little choice but to leave or depend almost entirely on non-farm income. These farms are usually too small or too heavily in debt, or both. They are often characterised by poor management, physical and financial. It is our observation that lack of a real partnership between spouses, including agreement on common goals, is also a feature of many of the farming families who fall into this category.

For many the past decade has been a period of stress, of changing values, and of apparent government indifference. The successful transition from full-time farmers to full- or part-time employees is a difficult one, and will be made only with effort from the individuals concerned and support from the community.

The historical invisibility of rural women

As Kingston (1988) notes, the historical invisibility of women in agriculture is a global phenomenon. Gibson, Baxter and Kingston (1990) explain this invisibility in terms of an ideology, which prevails in rural communities in spite of evidence to the contrary, that farming is men's work. Thus the significance of rural women's work is obscured, even though individual male farmers may appreciate their wife's contribution.

Nor are rural women's lives adequately represented in art, literature or scholarship. Alston (1990, pix) claims that although it has been estimated that over a million women live on family farms in Australia, such women have rarely been the subjects of independent study, and have been "peculiarly absent from the imagery of rural life". This eclipsing of rural women's realities has serious consequences. Kingston (1988) argues that while women's labour has become crucial to the economic viability of many family farms in Australia, women are denied public recognition for their place in agriculture. Recent attempts to redress the conceptual invisibility of rural women, include James's (1989) collection of papers which flag pertinent issues, and Williams's (1992) research paper: The Invisible Farmer.

RESEARCH FINDINGS

The information presented here is drawn from case studies comprising a sample of women who are present or past students of the RMDC, and women belonging to the West Moreton Dairy Women's Network. The research data is mainly qualitative, but includes results of a small postal survey as well as interviews and observations conducted 'in the field'. It represents the recorded voices of about sixty women, and the survey returns of a further seventy-eight.

The field work included attendance at meetings of the West Moreton Dairy Women's Network at Boonah and Caboolture, overnight or weekend visits to properties at Boonah, Monto, Nanango, and Inglewood; and meetings with students of the Rural Management Development Centre at Brisbane, Dalby and Emerald, and Rockhampton.

Women's roles on farms and in the extended farm family

The women surveyed by postal questionnaire were involved in a variety of agricultural industries including dairying as well as beef and wool production. With a very few exceptions, they were married and living on the family property. About half were in an extended family situation. That is, other members of the husband's or wife's family live and/or work on the farm or an adjoining property, and have a financial interest in it. From their responses, a profile of farm women emerges as multi-skilled working women who are concerned that their hard work and diverse skills should be recognised. They clearly do not feel that this is the case at present.

In the second part of the questionnaire the women were invited to express their concerns about the farm, the extended farm family, and the local community. The comments reveal serious concern about the future viability of family farms, with a number of women mentioning the combined effects of debt, uncertain markets, drought and inappropriate government policies.

When some of these themes were further explored in interviews with both RMDC students and members of the Dairy Women's Network, it was found that considerable diversity exists in the lives of women on agricultural properties. Given the constraints of the patriarchal culture within which they are embedded, women choose to occupy a variety of positions in relation to the family farm, four of which are typified below. It not suggested that all farm women conform to one of these positions. Rather, they may adopt elements of more than one position, either simultaneously or sequentially. All positions are considered legitimate and valid responses by women to their circumstances.

(1) The traditional role

One of the most significant features of life on family farms is the intimate relationship between source of income, workplace, and family life. As recent studies by Dempsey (1992) and Poigner (1990) reveal, the social and economic forces which structure this situation are very patriarchal. Power structures and decision making are highly gendered.

Broadly speaking, between the family and the farm there is traditionally a gendered division of interest and responsibility, with the farm being men's primary interest and responsibility, and women taking primary responsibility for the nurturing of children and household matters. Such women play a support role, albeit an essential one, and they learn to accommodate their needs and agendas to those established by their husbands and male relatives. Even though, arguably, the economic enterprise which the farm represents exists to sustain the family, this priority is not reflected in decision-making, at least in women's perceptions. In the words of one woman who responded to the survey: "The farm always comes first."

Dempsey (1992) argues that in rural Australia women's energies are channelled to support men's agendas. The conversations recorded with women for this study support this contention. While the family home is the domain within which farm women have responsibility, decision-making power and recognition, women's energies are frequently co-opted to serve in the male domain of the farm, where they have relatively less of all these things. Further, men's energies are typically not co-opted to serve in the woman's realm. When one considers that women, and their children, are dependent on the success of the farm, it is easy to see why, even though they may complain about the situation, women continue to allow this to happen.

Many women love the farm, and are interested and skilled in both household and farm work. They may find considerable fulfilment within the traditional role, especially in the nurturing of their husbands, children and grandchildren, and by extension, of the community through voluntary work. Some of these women are involved in the farm work in ways which satisfy them. For example, some of the dairy women interviewed said that they participate in herd breeding management. Others related that they enter their farm produce and craft work in the local agricultural show with gratifying results.

While many women doubtless do take pride in their work and derive satisfaction from it, their ability to do so is limited by the subordinate nature of their relationship, as farm workers, to their husbands and other men on the property. The responses to the postal survey indicate that even though they may be closely involved in the work of the farm, women on family farms define themselves as "wife" or "wife and mother", but not as "farmer" or "manager". When asked to describe the nature of their work on the farm, they are likely to use terms such as "Jack of all trades". Of course, the other half of this old aphorism is "Master (sic) of none". The very fact that only masculine terminology is available to such women to name what they do is itself very significant.

This state of affairs affects the kinds of knowledge and competencies they build in relation to farm work, and the levels of satisfaction and self-esteem they can derive from it. Thus, while wives are always busy, they may not derive much sense of achievement from this activity. Women who do seek to participate in the work of the farm on some other footing which would entail being given responsibility and recognition are quite likely to experience the frustration of male exclusion practices. This is particularly the case with daughters-in-law, whose position in relation to the extended farm family structure appears to be a most unenviable one. They not uncommonly experience exclusion, frustration and disempowerment. One such woman summed up her relationship to farm work in this way:

> "I help out where ever I'm needed, when I'm needed, and if I'm allowed."

Such treatment can hardly be conducive to high self esteem in these women. One of the RMDC students who was interviewed said that it had taken her twelve years of "careful diplomacy" before she could overcome the resistance of the senior males on the property to her participation in the business of farming. This was in spite of the fact that her motivation for wanting to be more involved was entirely consistent with a traditional definition of a good wife: that is, she wanted to support her husband in all things. Like many such women, she found that the aspect of the farm business where she had a chance of finding an acceptable role for herself was in bookkeeping. Whether this role might extend from that of secretary-bookkeeper to greater participation in the management of the business was another matter, but presumably she hoped that completion of the RMDC course would give her some status in that respect.

Paradoxically, such women are simultaneously overworked and underutilised. Their energies are drained by their being co-opted to do both farm and domestic work, but at the same time the farm is deprived of the intellectual and managerial input they would be capable of contributing if their talents were recognised and if they were given more autonomy and responsibility.

It was clear from the conversations with farm women interviewed for this study that some women resist the tendency for their energies to be drained by the farm by limiting their involvement in the farm work where this is possible. Women who make this choice also limit their capacity to acquire the knowledge base necessary for recognition as a "farmer" and acceptance in male dominated farming forums. This is not to say that acquisition of farming knowledge would necessarily ensure such recognition, since the culture in which they live discourages women's equal participation in industry organisations.

(2) Women who identify strongly with the farm.

As mentioned above, the deepening crisis in the rural sector means that farms are less able to sustain the employment of paid labour, so increasingly both the mental and physical labour of wives is required. Many women take an active role in the family business, typically taking more responsibility for management, including maintenance of financial and other records, but also sharing much of the physical labour. Such women described themselves as enjoying equal partnerships with their husbands, including responsibility for decision-making. In a few cases, the level of participation as a business partner extended to active involvement in the relevant rural industry organisation.

The issues for these women would appear to be in gaining recognition for the work they do on the farm, in being able to define themselves as farmers, and in having some forms of social contact with other women in similar situations. Such women can be greatly assisted by changed attitudes on the part of professionals such as agricultural extension workers. To make the transition from the traditional role of "helpmate" to "business partner", a woman requires not only recognition from the wider community but also a renegotiation of relationships and roles with husbands and other family members. The latter is, of course, not an easy matter, since it entails change in attitudes and practices sedimented by tradition and legitimated by cultural values.

In one case which was reported during this study, successful completion of the RMDC course was a significant factor in such a transition. This women had married into an extended family farming business and experienced some of the typical 'daughter-in-law' difficulties. She is now much more contented with farming life because her enhanced knowledge base has brought recognition, and she can enjoy full partnership with her husband in the family business.

(3) Farm women who create their own spaces.

Other women, while being supportive of their husbands and being willing, to various degrees, to help out on the farm, do not identify so much with the farm. Such women are likely to exercise some resistance to being co-opted to work on the farm, and to create some kind of space in their lives which they can fill with an activity which is "just for me". Such space may vary from interest in a hobby or craft, to formal study, a small business venture, or paid employment off the farm. One woman justified her choice of an independent career with the words: "My talents are much better utilised here at work than in the woolshed at shearing time".

Some of the women in this category were experiencing considerable difficulties. Sometimes the communities into which they had married did not understand or validate their need for self actualisation and their choice to pursue the careers they had been trained for, with the result that they often felt socially isolated and alienated. The physical demands on them were very great as, like their urban counterparts, they attempted to cope with a quadruple workload of housework, parenting, farm work and paid employment.

(4) Women who manage agricultural properties in their own right.

Of the women encountered in this study, most of those who manage family farms were widows. A few were daughters of property owners who had done farm work from childhood, showed aptitude and preference for farming in early adult hood, and whose parents had helped to establish them on the land. In some cases this happened because there was no son available to work the farm.

The stories told by the women who were widows have certain similarities. After the initial shock of their husband's death, they had elected to stay on the property, usually in the face of advice to the contrary from family and neighbours. At first they doubted their ability to manage the property on their own, but that as time went on they discovered that they could do it very well. Some of the women had initially appointed a male manager, but in each case these women had become dissatisfied with this person's work, and had eventually taken over the management themselves. With hindsight they realised that in the years when they had "helped out" with their husband they had actually acquired more knowledge about the property than they gave themselves credit for. In several cases these women had "turned around" their property. Under their management an enterprise which had been at risk became prosperous.

In the process of making the transition from "wife" to "manager", some of these women had become aware of the nature of male hegemony in rural cultures in ways which would not have occurred had they still been operating in the traditional role. One woman said that in the period when she was attempting to take charge of the property, she experienced reactions ranging from lack of support to outright opposition. She was made very aware that the "right" thing for her to do was to sell up and leave. In this case, we believe this could be described as a radicalising experience. Thus the issues for such women also derive from the fact that, despite what they may actually be doing, women are not defined as farmers or managers in traditional rural cultures.

COMMUNICATIONS ISSUES RAISED BY THE RURAL WOMEN IN THE STUDY

(1) The priority of men's agendas

In the responses to those parts of the questionnaire which were intended to elicit women's perceptions of the relationship between the farm and the family, nearly all agreed with the proposition that farm matters and family matters are closely entwined. Of the comments offered on this theme, fourteen indicated that it is the woman's view that farm matters are given priority over family matters. This view is summed up by the statement: "The farm always comes first." One woman's exasperation with this state of affairs is evident in her comment: "Work, eat and sleep farms".

(2) Recreation and communication

Lack of time-out for family recreation, and the importance of interpersonal communications were recurring themes. These themes are associated because family recreation time is also a communications issue, since many women anticipate that when husbands are away from the farm there will be more opportunities for communication. However, while they may perceive that family holidays are necessary, the responses to this survey indicate that women find it difficult to argue successfully for these needs to be given priority in the face of perceived pressing work requirements on the farm. If family recreation time could be redefined as good management practice, they might be better able to justify their position.

(3) Extended family relationships

A feature of family farming which shapes the lives of rural women is the prevalence of extended family partnerships, with two or more households living on one property or on neighbouring properties. Farm wives are likely to be deeply involved in extended family relationships and politics, but it appears that, in the gendered communication patterns prevalent in the extended farm family workforce, women's skills as communicators are not adequately valued or utilised. One critical communications issue which was raised repeatedly was the difficulty of discussing inter-generational farm transfer and planning for the retirement of the older generation.

(4) Stress management

In the course of the research, Grace talked with a marriage guidance counsellor and a social worker, both of whom confirmed her perception that there are some common communication patterns among farming couples in response to stress. For example, male farmers typically respond to stress by immersing themselves in physical labour and distancing themselves emotionally. This contributes to stress in their wives, because for women, self esteem is closely associated with a sense of closeness and well-being in the relationship. Women respond by trying for closer communication, repeating suggestions and requests for things like family holidays. Unfortunately, men often perceive this as nagging, and distance further. This kind of pattern becomes circular, self-perpetuating, and dysfunctional for both parties.

Both men and women could benefit from educational experiences which help them to understand their communication style differences and provide strategies for change where appropriate.

(5) Personal growth and development

Some of the women interviewed were concerned about the pressures which changed circumstances placed on their marital relationships. Even though, in some cases, some role reversal was happening as husbands took on some of the domestic responsibilities, the women saw themselves as more progressive in their thinking, more adaptable, and better able to respond positively to change than their husbands. However, they did not see unilateral change as desirable, even though in many cases that is what is happening. In their own words, their concern is that "We must be able to take our husbands with us". It would appear that, in order to realise the potential of strong marital partnerships to develop survival strategies, some farm husbands need to make more investment in personal growth and development.

In conclusion, our findings strongly indicate that those farm family members who have been successfully communicating are more likely to make the necessary accommodations to the current circumstances, whether it may be to strengthen the family business enterprise through flexibility, innovation and diversification, or to negotiate the transition to another way of life.

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COMMUNITY LANDCARE GROUPS: CHANGING SOCIAL RELATIONS AT THE LOCAL LEVEL

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ABSTRACT

The success of the National Landcare Program is dependent on the active participation of potential members. Ethnographic fieldwork is being carried out in a mixed farming area of south-west NSW to explore the developing relationships between Landcare groups and other social structures, in terms of both the relations involved and the cultural meanings associated with them. This research suggests that these groups are capable of generating wide support and cooperation amongst members, whilst keeping the development of elites in check. Landcare groups are indicative of qualitatively different social relations developing between rural people in response to the ongoing rural crisis. Farming, whilst still seen as an individual activity, must be carried out in a cooperative manner with consideration of the downstream effects of each individual's activities. In addition, farmers open themselves up to peer scrutiny in areas of both production and conservation. This contrasts with earlier relations based on social needs arising from spatial and temporal isolation. However, many farmers also believe that external forces drive them to develop inherently unsustainable, high input, production systems. Changing relations at the local level, however profound, may be insufficient to arrest the decline of rural lands unless measures are also taken to change relations of production at the macro level.

INTRODUCTION

The Australian farmer as independent, conservative and male, is a powerful stereotype permeating rural social life. It seems no exaggeration then to state that the success of the National Landcare Program is predicated on profound changes in rural society, namely the active participation of a wide cross-section of rural dwellers, including those not traditionally classified as farmers, in a cooperative effort to address rural land degradation. The main emphasis of the Landcare Program has been the development and support of community Landcare groups. It is believed that something in the vicinity of 2000 Landcare groups have now formed across the country. According to past National Landcare Facilitator, Andrew Campbell:

> Landcare groups ... are local groups of people, autonomous and self-reliant, mainly comprised of land users in rural areas, whose primary aims are to tackle land degradation and develop more sustainable land management practices (1991, p. 1).

The other important aspect of these groups is their self-help nature (Toyne and Farley, 1989). Typically, these groups engage in general meetings, field days, farm planning, tree planting and other works, establishment of demonstration sites and applications for government funding, under both the National Landcare Program and a variety of State funding programs. The autonomous character of Landcare groups can, however, be questioned, their relationships with state agencies on occasion being characterised by relations of dependence, conflict and/or domination (Lockie, 1994; Martin, Tarr and Lockie, 1992).

While relations with the state, whether conflictual or cooperative, are relatively apparent, the influence of local elites, the socio-cultural basis of participation and the effects of Landcare groups on other localised social practices are rather less so. It is these social relations with which this paper is concerned. It is based on ethnographic fieldwork involving five Landcare groups in the southern wheat-sheep belt of New South Wales. These groups are horizontally linked through a shared coordinator, all lie largely within the same Local Government Area, and to some extent share water catchments. They range in age from newly formed groups to – in terms of the time frame of the existence of Landcare – older, more established ones. They are also quite diverse in terms of their perceived vitality and effectiveness throughout the study area.

The data presented have been collected through participant observation and ethnographic interviewing. As well as the informal social interaction which comes from living in the area I attend, whenever possible, the activities of all the groups involved. To date over forty formal interviews have been conducted, involving over fifty participants, with people participating in Landcare through the area. Care has been taken to ensure adequate representation of different socio-cultural groups, such as those based on gender, land use and ownership. The results are, however, still to be considered preliminary as fieldwork will not be completed before the end of 1994.

SOME THEORETICAL CONTEXT

An important concern which has guided this study has been the desire to reconcile structural conditions, which appear to transcend the locale and set the parameters for the actions of individuals, with the apparently meaningful social practice of those individuals. The need to do this has, in no small part, become apparent whilst engaging theoretical developments in the field of rural sociology and looking for insights into the development of rural land degradation. More specifically, rural sociology has become concerned with the question of where the impetus originates for the restructuring of agriculture and rural areas.

Agriculture and agribusiness at all levels are characterised by the concentration and centralisation of capital. The fate of small commodity producers, including their environmental management practices, seems very much shaped by relations of production in which power and control lie with transnational agribusiness. To summarise the argument, in a grossly simplified manner, farmers have no choice but to exploit the land because of exploitative relations of production with agribusiness. Agribusinesses have no choice but to engage in exploitative relations of production due to the inexorable dynamics of the capitalist system. If they do not, other firms will, hence establishing a competitive advantage and forcing them from business. The logic of capital accumulation ensures that those who do not ultimately exploit the land will be replaced by those who do (see for example Buttel, 1980; Goodman, Sorj and Wilkinson, 1987; Lawrence, 1987).

These arguments provide a persuasive foil to the idea that land degradation is the product of ignorance and exploitative attitudes of the part of producers (Roberts, 1990; cf. Vanclay, 1992). Insofar as the above argument is accepted, the conclusion must also be reached that self-help groups like Landcare have little prospect for reversing degradation. Further, the role of the state in sponsoring Landcare is best interpreted as a strategy to maintain legitimacy, given widespread environmental concern, whilst actually leaving responsibility for action with individual land users and continuing to foster conditions for capital accumulation (Lockie, 1994).

However, the failure to consider more than superficially the question of agency limits us in our ability to understand the potential importance of Landcare. It is already apparent from other studies that farmers are well aware of structural conditions which lie outside their control and feel somewhat compelled to adopt strategies in relation to these which they believe to be economically and ecologically unsustainable, namely, high input farming practices (Lockie and Vanclay, 1992). Their adoption of these, however, constantly fails to live up to the expectations of researchers and advisors as farmers pick up some technologies rapidly whilst ignoring others. The agency of farmers, therefore, is a constant source of frustration to those who seek to influence them in order to satisfy so-called structural demands.

Following Giddens (1984, 1993), structure and action are conceived of as a duality, not as a dichotomous, and hence irresolvable, division. Such a position stresses the need to focus analysis on social practices, which exhibit 'structural properties' because of their relative continuity over space and time. Although many of the conditions which affect rural people may lie outside their control, and may not be perfectly understood, this does not discount the possibilities of both reflexive monitoring of these conditions (Giddens, 1984), and of quite distinctive individual and cultural interpretations and responses (Leeuwis, 1993). Landcare is particularly interesting because it has become a transformation point in the structural relations of rural areas, a focal point for change, in both relational and ideological senses. Without wishing to suggest that Landcare groups 'are rural society', or in some way represent 'test cases' (see Geertz, 1973), research focussed on

Landcare has significant importance for other areas of rural social life. The social practices associated with Landcare are closely integrated with a variety of less directly related social relations which must be considered in any exploration of the social aspects of Landcare.

While this paper will mainly be concerned with practices related to cooperative activity, it is vital to recognise the importance of other areas of social practice, the transformation of which Landcare can be implicated in. These include intrafamilial and public gender relations, other local organisations, and the aforementioned relations between local organisations and the state.

LANDCARE PARTICIPATION

The Landcare groups participating in this study all appear to have high rates of participation, in the sense that a high proportion of land users within their group areas are listed as members. A more limited number of people, of course, are likely to attend any given meeting, and meetings themselves, for one of the groups at least, are themselves a rare phenomenon. There is insufficient data at hand to date make any more than these very general statements about levels of participation. Comment can be made, however, about the type of people who participate in Landcare groups, their involvement with other local organisations, and their own beliefs about the levels of participation from within their communities.

When I began interviewing Landcare members it became very apparent that although in the first instance I was largely interviewing whoever I could get, I was accessing a very diverse range of people. Although it took some effort to secure a reasonable number of interviews with women only, I quickly found myself interviewing commercial farmers, smallholders, farm managers, alternative farmers such as biodynamic and permaculture farmers, and people who worked off-farm. Within the group of commercial farmers there were those who were considered district leaders and innovators, alongside those who were content with more 'traditional' farming systems.

While some thought that the same small group belonged to every local organisation, most believed that Landcare had a wider membership base. This was borne out by the interviewees themselves, many of whom were not particularly involved otherwise in their communities. For some this was merely a matter of time and prioritisation, others such as smallholders, had little interest in most of the other organisations, and some felt that they had never really fitted into their communities before and had kept to themselves. There is little doubt that for some of these people Landcare has led to increased social inclusion and personal growth.

Amongst Landcare members there is a belief that those who do not participate fear compulsion to undertake Landcare related works. There is a dual concern here, one relates to the question of autonomy and control, something most farmers are loathe to concede. The second concern relates to the ability of people to afford Landcare related works, a concern amongst participants as well:

> While we're very conscious of Landcare and all these other things, they're just extra things that you realise you haven't got the capacity to do a lot about financially. If you're in that sort of financial position they're an added pressure, while they're good and they need to try to be involved in something like that they do provide that extra pressure ...

Despite the involvement of an apparently heterogenous sample of the local population in Landcare, it is important to consider the question of where decision making power lies, and to whom benefits accrue, within groups (Gray, 1992; Lockie, 1994; Vanclay, 1992). Two of the groups, to date, have attracted significant funding for Landcare related projects. During lengthy discussions with people in leadership positions within these groups it was apparent that they had a very strong commitment to maintaining equity in the distribution of funds. This means making all members of the group aware of funding opportunities and encouraging them to apply; helping group members to apply where they may have less advanced literacy skills than other applicants; ensuring that group projects get spread around amongst members; and for one past chair, refusing to have grant money spent on their own property.

There is however a strongly held belief that funding, although vital, poses a serious threat to the cohesion of groups where funding becomes concentrated on a small number of properties, even if the people concerned have put a lot more effort into securing that funding. Related to this is the concern that people have differing levels of resources, personal and political, which they can bring to bear on their applications. Funding will not be targeted therefore towards the areas of greatest need, but towards the most articulate applications.

It does not follow from this concern with equity, however, that groups are genuinely democratic. While I do not wish to imply that they are dominated in their day-to-day activities by elite groups, there is little evidence to suggest that Landcare has eroded the resource base which gives such people the ability to dominate local organisations, and am aware of at least one incident where a local politician managed to convince a group to adopt a proposal which the mood of the meeting had clearly been against. Whatever the basis of this power is, the democratic functioning of the group would appear to be based in no small part on a decision not to use it. One other politically active farmer I spoke to thought that Landcare had captured the imagination of people to such an extent that the possibility of elites dominating group decision making was minimal. This example, and other observations, would suggest, however, that the elites concerned must have their own imagination's captured regarding genuine community input.

CHANGING SOCIAL RELATIONS

It is apparently paradoxical that alongside the recognised ideological importance of independence to 'the man on the land' we should also find concern for the so-called loss of rural communities. As populations decline, and transport and communications improve, community focal points like schools, small businesses, halls, tennis clubs and churches suffer, and perhaps close. People go further afield for their services and entertainments, and also seem to be less likely to engage in informal entertaining in their neighbours' homes. Many of the people with whom I spoke were rather more ambivalent towards these changes than perhaps many outsiders are, generally being more concerned with the development of today's cost structure, modern farming techniques and land degradation.

The sense of community that people talk about having lost was based on spatial and temporal isolation, the result of poor transport and communication. Activities revolved around entertainment, education and religion. With one exception there has been no mention of activities associated directly with farming dying out. Landcare then is not 'replacing' the old communities. Rather, even where apparently similar benefits accrue from Landcare involvement, they arise in a fundamentally different social environment. It seems apparent, for example, that for many people Landcare does fulfil some of the social needs that would have been previously provided by other local organisations and networks. Landcare is for many a focal point for their social interaction, arising not however, from poor transport and communication links, but from their marginal financial situations. Farming has become, even for those in a stronger financial situation, a seven day, twenty-four hour, job, and people are more comfortable spending time involved in activities which can be seen to contribute directly to their farming activities, than those explicitly associated with entertainment or emotional support, even if for some these appear to be a primary benefit.

COOPERATIVE ACTIVITY

In claiming that farming is becoming more of a cooperative activity it is important to specify the ways in which this is not happening just as much as the ways in which it is. In doing so it will be important to consider how, in each case, the people concerned perceive the cooperative activity to be affecting their own level of autonomy and control.

There has always existed a degree of cooperative activity between rural people, perhaps most evident during times of crisis, and just as people have always helped out during bushfires, so they have always helped out on each others' farms, lent and borrowed equipment, and sought and offered advice. Much discussion of cooperative activity followed a question asking about what other issues or problems the community had tried to address in the past on a community basis. One of the few people who talked, in response, about informal helping between neighbours stressed the non-intrusive nature of this help:

> ... well we do help one another quite a lot ... both these fellows have been a tremendous help to me, chap just over here ... he's a colossal guy, if you need help he's there, and having finished the job, cup of tea and he's gone, he doesn't intrude ...

Most people, on the other hand, were keen to stress how little farm issues had traditionally been tackled on a community basis, particularly those issues, such as footrot, which were seen to reflect on one's ability as a farmer. Footrot was described as a social disease, a social disease which unfortunately travelled easily from one property to another. The majority of people interviewed believed that there was, however, a hitherto unforseen degree of cooperative activity revolving around basic issues of farm management and decision making, particularly in regard to problem solving, whether this be in relation to conservation or production issues. Although this project has concentrated on formal organisations, many participants believed that involvement in these organisations led to increased rates of informal interaction, firstly, by providing a forum for interaction that is not otherwise available to people who essentially work by themselves, and secondly, by raising issues and letting people know they were not the only ones suffering from them.

Following recognition, it seems obvious that before dealing with problems cooperatively people must be prepared to admit to others that they have them. There seems little doubt that this has been occurring, and that the people involved believed it to represent an enormous change. There was also a recognition that many problems were catchment problems and that individual efforts to address them were bound to be ineffective. Perceived benefits of group involvement primarily revolved around the need to cooperate in finding solutions because of the off-site effects of farming practices and land degradation. People were concerned that individually they could achieve little, and saw a responsibility to their neighbours to consider the effects of their activities on them.

There seemed to be a growing consensus amongst those interviewed that the traditional individualism of farmers needed to change:

> I think the trouble with farmers is it's always been impossible to get into a group. We are very proud of doing our own thing. Just because somebody else does it doesn't mean that we are going to, our independence is more important to us, and to an extent, farmers who have suffered economically are pressured to doing their own thing. I think we are going to have to change that idea to survive.

The main pressure being identified behind this shift being, not surprisingly, financial:

> I think the recession has had an enormous effect ... well I think farmers have begun to realise that they need one another, whereas I think they used to be separate entities, they would do their own thing and there was not much discussion, not much interaction or support or anything like that, you might have had a chat to your neighbour over the back boundary fence but that was as far as it went, and I think the recession has brought a lot of farmers together, and I think that's a good thing because then they can bounce ideas off one another and share ideas and that sort of thing.

Any change towards a community in which people think it helpful to discuss their farming problems with their peers, and indeed consider it their responsibility to take into consideration the off-site effects of their activities, must be seen as profound:

> there's a bit of pressure in the job now to do the right thing. I think farmers are developing a social conscience for the environment ... there's a certain amount of pressure from farmers looking over your fence to get it right.

There can, as already mentioned however, be negative effects associated with this pressure due to the marginal financial situations of many rural people. There is no reason to assume that peer pressure to do the right thing by neighbours will not be evident in groups other than Landcare. Those in particularly dire circumstances are, therefore, likely to become socially isolated and excluded from possible sources of support and assistance. It is also a mistake to assume that farmers represent an homogenous group with largely identical priorities and ideas about farming. Although they may talk in similar terms at a very abstract level, such as the need to make a profit, look after the resource and avoid risk, their ideas about how this should be achieved, and the strategies they adopt can diverge widely. Peer pressure to do the job 'right', and a strong commitment by individuals to doing so, gives Landcare groups the potential to become arenas of conflict.

Given the apparent role of financial pressure in rural change, it would seem important to consider its effects on the types and levels of economic cooperation between farms. It is here perhaps that individualism could be seen to retain its strongest influence. In discussions about cooperative activity amongst farmers people frequently focussed on machinery syndication and sharing. Although a couple of people thought this may have been slowly increasing, there was a strong aversion to this form of integration on anything but the smallest items of capital investment. In discussing this aversion farmers relate it more to risk management strategies than to individualism.

Risk is a major criteria for the evaluation of farm practices and decisions by farmers due to the inherently unstable nature of climates and markets (Lockie, Mead, Vanclay and Butler, in press). Sharing major items of machinery, such as sowing and harvesting equipment, exposes them to risk because the highly seasonal nature of agriculture ensures that everybody needs this machinery at the same time. The scenario most often painted is of waiting with ripe crops for a neighbour to finish using the header, only to have heavy rain come through in the meantime and damage the crop. This reduction in flexibility to respond to conditions as they arise is an unacceptable risk. Similarly, machinery breaks down, and whether machinery has been damaged through negligence or not, where vital equipment is concerned people prefer to be responsible for their own. The sorts of capital item people are more comfortable buying through syndications are those which have a greater degree of flexibility in their use, such as windrowers, and those which are cheaper, and therefore do less to ease the financial burdens that make syndication more attractive.

One other area of potential integration is in the marketing of farm produce. It is probably safe to say there has been a definite increase in this kind of activity, at least in relation to grains, although it is far less certain just how widespread it is. Over the last few years grain marketing has been progressively deregulated. A growers marketing cooperative was established in part of the study area in the early nineties in an effort to make the most of this new environment. This cooperative attracted wide initial interest and support. Since then membership has dropped, but stabilised. One of the main reasons it seems, for many people who left the cooperative, to withdraw support has been a lack of preparedness to accept the decisions of the Board of Directors when they thought they may have made more money individually. The cooperative has not been able to provide enough of a premium to retain those who would rather maintain their independence.

This form of economic cooperation removes considerably more autonomy from the individual than farm and catchment planning in their current form, or other Landcare activities. Although I spoke directly to only a couple of people who had left the cooperative, none of these related their experience to risk management, only their belief that they had lost money. These people had obviously come to the conclusion that they could make better decisions about selling than the cooperative could, because theoretically at least, cooperative membership reduces their exposure to risk.

CONCLUSION

The data collected so far, with Landcare participants, suggests some broad generalisations about cooperative activity. Although to a large extent involvement in community activities and projects is seen to be of itself a good thing, cooperation is more likely to occur around those activities which do not impact on individual control of the farming enterprise. Group activity revolving around problem solving and planning threatens this to a minor degree relative to direct economic cooperation through machinery syndication or produce marketing. Where individual control is affected by an activity, that activity is likely to be avoided until the individual believes they can no longer afford not to participate.

The overriding variable suggested by this last point is the perceived magnitude and immanency of the threat to which cooperative activity is oriented. People will continue to deal with problems in their farming businesses themselves while-ever they have the resources to do so, but in times of crisis join together to ward off common threats and help their neighbours. The crisis currently galvanising rural communities is not of bushfire, drought, or flood, although such threats have done anything but disappear. The crisis is a political, economic and environmental one, with significant implications for social life, which is in no small part responsible for the successes of Landcare in the study area.

It is perhaps one's thoughts on the causes and magnitude of this crisis that will contribute to one's assessment of the potential for Landcare to ultimately bring about substantial change in the way the rural environment is actually managed. Insofar as the political-economic explanation of rural land degradation is accepted then this potential would have to be seen as limited unless changes are made at the macro level to change the relations of production affecting agriculture. While rejecting the determinist overtones of much of this literature there is no satisfactory competing explanation at the macro level for restructuring in agriculture. In taking a more actor oriented perspective it is acknowledged that people are not necessarily helpless pawns in the face of macro level forces, however, it remains to be seen, despite the profound changes that are taking place in local social relations, whether Landcare will provide a forum from which people can offer any real resistance to these forces and enable them to make profound changes to farming systems.

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EVALUATING COMMUNITY DEVELOPMENT WORKSHOPS HELD IN THE WIDE BAY/BURNETT REGION OF QUEENSLAND

Zona Hussey-Smith and Patrick Morrisey — Australia

ABSTRACT

As Governments across Australia increasingly devolve responsibility to communities to manage affairs, previously the domain of the state, such as education and environmental management, the need for more effective local leadership becomes necessary. With the continuing trend of economic and social decline in rural communities, the need is even greater.

A series of Community Development Workshops were run in 1993, focussing on informal training in leadership, effective meeting procedures, project planning, team work and conflict resolution. There is a great need for this type of training, especially in more isolated towns, to assist communities to manage their rapidly changing environment. Delivery of such services needs to be coordinated across disciplines, for cost effectiveness, networking, and the broader benefit.

The target audience were landcare groups and school Parents & Citizens (P&C) executives, yet within 60 participants a total of 38 separate groups were represented. This shows the amount of organisations that exist in the bush, the extent to which 'a small few are on every group' and the ability for one series of workshops to influence the effectiveness of 38 individual organisations.

The evaluation carried out with the workshops suggests further training of this kind is desired and necessary and they need to be flexible, informal and fun.

This paper expands on the rationale, style of workshops and insights gained.

BACKGROUND

Landcare groups are voluntary groups of people, mainly comprised of land users in rural areas, whose primary aims are to tackle land degradation and develop more sustainable land management systems (Campbell 1992). This is set in a much broader context of rapid social and economic change, which influences the extent to which landcare groups and others can move towards more sustainable land and water management systems. The focus needs to be on moving towards more sustainable rural communities, a factor of which is improved land and water management.

One authors' role was to facilitate part of that process through 25 landcare groups in the Wide Bay Burnett region of Queensland A need was identified within these community groups that lack of effective leadership was one of the major challenges facing the progress of the evolving landcare movement This is also one of the major reasons why this progression to sustainable rural communities is slow to occur

At the same time, as school P&C's take on a greater role in managing their school programs, the need for parents to possess the skills which enable them to perform this function becomes more apparent

The direction of self-managing schools requires parents and community members to participate in the development and operational planning, budgeting and review process of their school Again similar needs were identified regarding leadership, planning, and team work skills Wide Bay Southern School Support Centre services 61 schools in the district

It was for these reasons that the officers across departments, responsible for assisting these two programs at a regional level, decided to pool their expertise, networks and resources, and run a pilot series of short training sessions, in towns across the region to assist communities develop these skills

It was also identified that many 'separate' groups within these rural communities are trying to achieve similar objectives, yet in isolation from each other For example, some landcare groups are trying to achieve quite broad objectives, some of which could be implemented through existing groups and visa versa

OBJECTIVES

The objectives of these workshops were to

- provide an introduction to leadership and project planning concepts to executive members of rural groups (target groups were school P&C's and landcare groups);
- provide a forum for networking between the myriad of rural groups, a sharing of ideas, and a better understanding of each others objectives; and
- gauge the level of interest for further workshops

METHODOLOGY

1 Through observation, it was perceived by the organisers, that a lack of effective leadership and organisational abilities were some of the factors hindering landcare and other community groups' performances

2 Through informal surveys a large variety of executives' perceptions were identified about the need for improved leadership

3 A number of methods were developed to address this perceived need One method was to run a pilot series of informal training workshops on leadership and project planning skills for landcare groups and school P&C executives Another method was on the spot feedback and coaching

4 A pilot series of eight workshops was developed, taking account of perceived needs

5 The first workshop was trialled, reviewed, and modified for the following seven (7) workshops

6 Another seven (7) workshops were carried out

7 A questionnaire was developed and completed by participants at the end of each workshop

8 These results were evaluated and compiled

9 A second series of workshops were developed, based on the outcomes of the evaluation

THE PROGRAM

A series of eight evening workshops were run These were held at local schools and open to the whole community at no charge Adult learning techniques were used The program content included four topics Project Planning, Meetings, Leadership and Conflict Resolution The workshop structure was flexible to cater for individual's needs

Participants discussed the problems they have with meetings, and shared methods for improving each others challenges. Decision-making processes and the roles of different members of groups was discussed, and a simple minutes pro forma was distributed

Participants completed a Belbin self-perception inventory1, which was then scored on the spot The various natural team role individuals played within their respective organisations and the implications of those based on their official roles and others individuals preferred roles was discussed with many enlightened outcomes

Participants discussed methods they used to plan projects in their respective groups These highlighted gaps in methodologies for follow-up discussions

The full program and flexible time allocations to topics meant sessions on *hands-on project planning* and *conflict resolution* were not covered

WORKSHOP EVALUATION AND OUTCOMES

A two page questionnaire (Appendix 2) was developed by two visiting students Geratts and Niemansverdriet and the author, which was completed by 42 (65%) of participants at the end of each workshop The results of these are

Participants

Whilst the workshops were open to everyone, the target audiences were P&C and landcare committee executives Sixty people participated, and between them they represented 38 individual groups, mainly through their executive members Some individuals were executives for six groups

Two-thirds of the participants were women

Promotion

Most participants heard about the workshops through direct mail to target audiences, schools and landcare groups, through their newsletters and follow up calls A few heard about the workshops through newspapers and word of mouth

Clarity and Usefulness of Workshop Content

Most respondents ranked all three topics as being very clear and very useful

Improvements

Many respondents commented that the workshops could have been improved with more time available and with a larger number of participants Lack of awareness of the workshop was the main reason given for low attendance

Note The organisers were happy with the attendance levels The smaller groups were ideal for getting people to loosen up, share experiences and help each other

Most respondents enjoyed the workshops, and felt they were well done and worth while

Further Workshops

- 45% of respondents were interested in further training on conflict resolution
- 38% of respondents were interested in further training in meetings, project planning and leadership skills
- 93% said they would recommend the workshops to someone else

RECOMMENDATIONS

From the evaluation and feedback given, further informal training of this kind is both desired and necessary

Footnote

R.M. Belbin 1976 found that overall team effectiveness depends upon the knowledge team members have of each other, and use

APPENDIX A

Groups Represented at Workshops

Thirty-eight community groups were represented and participants functions in those were

Name of Group	Your function
School	Principal x 3, staff leader x 1, member x 1
Parents and Citizens	President x 12, Secretary x 5, Member x 4, School Develop x 2
Landcare	Chairperson x 2, Secretary x 2, Publicity Officer x 1, members x 3
Qld Dairy Organisation	
Cattlemen's Union	Branch and Regional secretary
Qld Grain Growers Assn	Branch President x 3, Treasurer x 1
Qld Country Womens Assn	Divisional Press Secretary x 1, member x 1
Assn. of Womens Education	President
Swimming Club	
Tennis Club	President x 1 District Tennis Assn. President x 1
Cricket Club	Secretary
Chamber of Commerce	Secretary
Arts and Crafts	
Lions	Vice President
Show Society	Function Assistant
Historical Society	Museum Director x 2
Rural Watch	Assistant Coordinator
State Emergency Service	Member
Bush Fire Brigade	Secretary
National Party	Secretary/Treasurer
Return Servicemen League	President
Aust Conservation Foundation	President x 1, Publicity Officer x 1
Scouts	Treasurer
Natural History Assn	Junior Mountaineer Leader
QCPCA	Member
Youth Council	Chairperson
Kindergarten	Director x 1, Secretary x 1, Treasurer x 1, Member x 1
Youth Interest Committee	Adviser Organiser
KATS	Secretary x 1 Member x 1
SDP	Member
SBMATA	Member
ASSPA	Member
P-10 Design Standard Working Party	Member
Church Sunday School	Teacher, Superintendent
Church community	Member
HRE	Member x 2
Bus Company	Secretary

APPENDIX B

Summary of Questionnaire

I heard about this workshop through:

School	21
Landcare group	13
phone call from organiser	3
friends	3
newspaper (community news)	3
Industry (QGGA)	1
Other	1

The information about **Project Planning** was, on a scale of 1 to 5

The level of clarity	The level of usefulness
08% ranked it 3 out of 5	15% ranked it 3 out of 5
53% ranked it 4 out of 5	48% ranked it 4 out of 5
39% ranked it 5 out of 5	34% ranked it 5 out of 5

The information about **Meetings** was, on a scale of 1 to 5

The level of clarity	The level of usefulness
07% ranked it 3 out of 5	16% ranked it 3 out of 5
40% ranked it 4 out of 5	34% ranked it 4 out of 5
53% ranked it 5 out of 5	50% ranked it 5 out of 5

The information about **Leadership** was, on a scale of 1 to 5.

The level of clarity	The level of usefulness
14% ranked it 3 out of 5	16% ranked it 3 out of 5
52% ranked it 4 out of 5	51% ranked it 4 out of 5
34% ranked it 5 out of 5	33% ranked it 5 out of 5

I am interested in training about:

Project Planning	38% were interested in further training
Meetings	38% were interested in further training
Leadership	36% were interested in further training
Conflict/resolution	45% were interested in further training
None of the topics	

Would you recommend this workshop to someone else?

93%	(39)	said Yes
None	(0)	said No
7%	(3)	didn't comment

How could we improve this workshop?

(below is the list of all comments received)

"more information to the community so more people would attend"

"advertise"

"maybe do the workshop in two stages to cover all topics"

"wider publicity", "have more people"

"perhaps more time - big topics to cover in 2 hrs", "a little more time", "more time"

"change presenter more frequently. Zona speaking again later would keep people interested, a new voice would wake them up

"time constraints prevent doing more"

"things such as practical demonstrations, that is, conflict resolution"

"greater attendance perhaps" "more people", "more participants" "more people"

"more time spent on individual topics to give a greater depth of understanding"

"party hats"

"outline of who is who to start the session to giver everyone an idea of where they are coming from"

"more newsletter about process"

"extend the time, possibly a two night exercise"

"advertise it more"

If you have other remarks, please feel free to comment.

(Below is the list of all comments received.)

"very informative", "very worthwhile", "very well done", "very satisfying", "quite informative", "well worthwhile", "thank you", "thank you", "good job, keep it up"

"relieved to find no 'gam' being played (for example, ice breaker activities)"

"Enjoyable, interesting, thanks!", "smaller groups probably achieve more"

"something that requires people to stand up, half way through to stretch legs, renew interest and help num bums"

"most of us need things to be essentially practical and 'hands on', we aren't too good on absorbing abstract ideas"

DELIVERING SERVICES TO A REMOTE AREA COMMUNITY

Peter Munn — Australia

ABSTRACT

This paper investigates service delivery to a remote town in South Australia. The town, which for the purpose of this paper will be called Bushtown is by definition remote. It is over 300 kilometres from any service centre. The town has a small hospital, school, one person police station, hotel, shop and post office.

A group of service providers came together as a consequence of needs being identified by the local clinical nurse and local parents in the town. An open meeting was held between representatives of several human service organizations and local residents.

The service providers attempted to coordinate their services to Bushtown. There were several 'teething' problems involved in coordinating their services. This paper reviews the facilitators and inhibiters to improved service delivery within Bushtown. Lastly, the paper reports on the findings of the investigation into service provision within Bushtown.

1. INTRODUCTION

This paper has been prepared as a consequence of investigating service delivery to a remote town in South Australia. The town, which for this paper will be called Bushtown is by definition remote. It is over 300 kilometres from any service centre. The town has a small hospital, school, one person police station, hotel, shop and post office.

A group of service providers came together as a consequence of needs being identified by the local clinical nurse and local parents in the town. An open meeting was held between representitives of several human service organisations and local residents (Weetman, 1993).

2. METHODOLOGY

The writer initially met with the instigator of the co-ordinating team attempting to organize service delivery to Bushtown. Meetings were also held with representatives of several different organizations responsible for providing services to Bushtown and with users of the service. In-depth interviews were completed with these people. These interviews were non-structured as it was important to have people talk about their experience either as service providers or as users of the service.

Whilst the interviews were non-structured there were some questions that were consistently asked of all users. There were as follows -

1 How have you found the current services?
2 How have they helped you?
3 How many children do you have?
4 What other activities do you attend in Bushtown?
5 How do you find these activities?
6 What other services would help you?
7 Does your partner work around Bushtown?
7(a) Does your partner work around the homestead?
8 If he works away from the town/homestead for what length of time is he away?

Other questions were asked to each person as a means of following-up, clarifying and expanding their responses.Similarly, whilst interviews with service providers were non structured there were some similar questions asked within each interview. These were -

1 How do you see the service delivery arrangements to Bushtown as it is currently operating?
2 What do you see would improve its service delivery to Bushtown?
3 What do you see as your organization's current involvement in service delivery to Bushtown?
4 What helps/hinders your involvement?
5 Is there ways of enhancing your involvement?
6 What do you see as your organization's future involvement?
7 What is your method of travel to Bushtown?

Other questions were asked of each person interviewed that aimed at gaining a clear picture of their organization's role in providing services to Bushtown.

3. BUSHTOWN

This small town is approximately 700 kilometres from Adelaide. Access to Bushtown is by an unsealed road which can be impassible in wet weather. Facilities include a hotel (meals and accommodation), a hospital, public phone, post office, police station, school and general store. Approximately 90people live in Bushtown. The houses for locals tend to be grouped together and are seperated from the houses where the professional workers are located.

For women with young children (especially pre-school children) there are very limited opportunities to gain a break from their children. There is no extended family or relatives to assist in child rearing. Clearly for the women this can be both exhausting and demanding which in turn impacts on the patience that they have with their children and the lack of care they are able to give to them.

The town is remote and isolated. The support provided by the clinical nurses at Bushtown Hospital is critical to the well-being of both women and children. One of the woman summarised their position as "being stuck doing nothing except yelling at the children".

4. SERVICE DELIVERY COORDINATION

A team was established to help improve the delivery of services to Bushtown. The first meeting of this group in the latter part of 1992 focussed on "working relationships and assessment of need" (Weetman, 1993). Those involved in the team believed it had been a useful exercise.

The team aims at enhancing the well being of people in Bushtown and to help promote a healthier and stronger community (Weetman, 1993). It was set-up to help current needs, and enhance the community's ability to meet its own needs. Service delivery has improved through the development of this team. The establishment of a Parents group has been very positive. After one year of operation there is greater shared involvement and a continued commitment to a coordinated approach to service delivery. A climate for coordination has developed and there is a willingness to continue working together to meet the objectives.

5. THE SERVICE DELIVERY METHOD

Locally based services are provided by the Bushtown Hospital, Bushtown Area School and the Police Station. Bushtown Hospital is central to health and social service delivery within Bushtown. It operates as a small multi-function centre providing health, ambulance and social support services. It is a well respected service within the community and is integral in the planning of service delivery to Bushtown.

The organizations based in Port Augusta provide outreach services to Bushtown. Some of the services have set days for visiting Bushtown whereas others are based more on demand or request from the nurses based at the Bushtown Hospital. Hence they provide mobile services to the town. Some organizations visited as regularly as every 3 weeks whereas others were once per year.

6. THE HUMAN SERVICE ORGANIZATIONS.

Each human service organization has shown a keen level of interest in the coordination project. The amount of time and resource commitment varies between organisations based on the role and purpose of the organization, availability of staff, travel arrangements, need for their service and funding constraints.

7. AN OVERVIEW OF THE LITERATURE AND RELATING IT TO ENHANCED SERVICE DELIVERY IN BUSHTOWN

7.1 Service Delivery to Bushtown

The factors facilitating and the factors limiting service delivery will be discussed in this next section.

7.2 Factors Facilitating Working Together to Enhance Service Delivery

(i) Positive Attitude of Human Service Providers

The attitude of those service providers who interact with people in other human service organizations will influence the willingness of organizations to work together (Botsch,1988). This can be influenced by their level of job satisfaction, their relationship with their users and how they perceive people in other organizations (Glisson and James,1992). When these aspects are positive it is expected that there will be a receptiveness to cooperation and coordination (Glisson and James,1992). These workers will need to share information about users as well as being prepared to refer when it is in their user(s) interest (Gans and Horton,1975). In other words service providers are willing to share the power and control which they perceive themselves as having when working with users of the service (Gans and Horton,1975).

People from several different organizations were willing to be involved. There was some uncertainty as to how they would relate to each other, yet, there was also a sense of enthusiasm about sharing information with users of service.

(ii) Positive Attitude of Human Service Administrators

The ability of human service administrators to adapt procedures that allow for closer relationships between organizations as well as committing time to working with other administrators and service providers is important in facilitating better cooperation (Gans and Horton,1975; Halpert,1982). To spend this time means that there are some positive outcomes for their organization. This view is supported by Gibelman and Demone Jr.,(1990,32) who state that service delivery is significantly enhanced when "the agencies operate a system wherein each member performs those functions it is best able to perform." Acceptance of a cooperative approach enhances goal achievement for participating organizations (Gibelman and DemoneJr.,1990).

Acceptance occurs more readily when organizations are viewed as being "equal in status" (Halpert,1982,57). There needs to be respect by administrators for the "domain" of each organization (Levine and White,1961,597; Halpert,1982,57). The "domain" of an organization is seen by Levine and White (1961,597) as "the specific goals it wishes to pursue and the functions it undertakes to implement its goals." Once "domain consensus" is accepted organizations will continue to work together whilst attempting to reach their goals (Levine and White,1961; Halpert, 1982).

Administrators tended to be supportive, yet, were naturally conscious of the time and energy that was spent on the exercise. They were concerned that if attention was given to this one area would there be sufficient time to give to other areas.

(iii) Flexible Operating Procedures

Each organization needs to be receptive to coordination. Operating procedures need to have some flexibility to allow for coordination (Beatrice,1990). System openness is crucial for coordination (Beder,1984,87). Empirical studies on several different continuing education organizations showed that the receptiveness to inputs from people in other organizations was an important factor for coordinating services (Beder,1984,87).

Services were adjusted when it was realized that too many services being present in the community on the one day was counter productive. It was an overload for the users of services, especially for the small children in these communities.

(iv) Receptiveness of the Community

Attempts to improve services will be enhanced if this is viewed positively within the community (Glisson and James,1992). People in rural and remote communities have tended to be reluctant in using welfare services in the past although this attitude is now changing (Craig and Killen,1984; McKenzie,1988).

If the community values the service and view the service as being "compatible with the local negotiated values" then it is likely to gain support from locals and other organizations (Lynn,1992,12).

Coordination is often seen by administrators as a mean of reducing costs (Weiss,1981,25). It is seen as helping to increase efficiency and financial accountability (Weiss,1981,25). However, to follow through coordinative efforts is often incompatible with reducing costs. Increased accessibility, greater comprehensiveness of services often results in increased case-loads and commitment of time for the human service provider (Weiss,1981,34).

The users of the services were extremely grateful for the services being offered in their community. There was a keenness for the services to be continued.

(v) Accessibility of Services

Within rural and remote areas accessibility of services is a crucial issue (Martinez-Brawley and Delevan,1991). Accessibility is related to the geographical proximity of the service to the user, the waiting time to receive assistance and the cost of the service (Cheers,1992). For many communities their size limits service availability. Visiting services have limited accessibility, yet, in remote areas they may be the only services available to that community. Weetman(1993) argues that services to very remote communities involving several organizations requires a shared responsibility by them to coordinate service delivery.

Although most services were external to Bushtown the actual service delivery was within the town. The waiting time depended upon the nature of the service.

Fragmentation and duplication of services have been concerns for the social services for the past twenty years (Graycar, Davis and Dixon,1974). Coordination is seen as one means of reducing fragmentation and duplication of services within rural and remote areas (Rural and Remote Areas Unit (R.A.R.A.U.),1991). Hence it is viewed by several groups that have received services as a cost-effective method (R.A.R.A.U.,1991).

Having services provided within their own community was appreciated by the users of services. There was a recognition of the pivotal role of the nursing staff at the local hospital in providing health and social support services.Through services being aware of what each offered there was a decrease in fragmentation and duplication of service delivery.

(vi) Sensitive and Responsive to Needs

Martinez-Brawley and Delevan(1991) in their project investigating service integration at the county level of Pennsylvania sought the views of service providers, administrators and county officials towards the goals of the social services. Being sensitive and responsive to needs was ranked as the top priority by these people (1991,31). To enable this to occur requires human service providers being open to options that will enhance the well-being of their users (Beatrice,1990).

The establishment of a team to assist in coordinating service delivery can be seen as an attempt to be sensitive and responsive to needs. The willingness to meet with local service providers and residents is a clear example of responsiveness of needs.

(vii) Ownership of Service

Ownership of services is a key issue for people in rural and remote areas (Martinez-Brawley,1990, Cheers,1992, Lynn,1992). Ownership relates to the community understanding why the service exists and are supportive of it being there (Lynn,1992).

When organizations are viewed in this manner people are more willing to use the service or coordinate activities with this organization.Cox and Veitri (1992,110) summarize the position of community services in rural and remote communities when they state

"it is clear that effective delivery of services, and understanding social need, requires coordination, planning and advocacy, at a local, regional, state and federal level."

The local Bushtown community had received little assistance in the past with parenting skills. They were keen to gain assistance from those organizations who were willing to provide these services.

7.3 Factors Limiting Working Together to Enhance Service Delivery

(i) Threat to Organizational Autonomy

There will be a reluctance to work together if it is seen as posing a threat to the autonomy of the organization (Whetten, 1977, Halpert, 1982; Weiss, 1987). This occurs when people working in an organization perceive current routines being threatened, fear a loss of identity or prestige (Halpert, 1982; Weiss, 1987). The unsureness created through coordination will want to be minimised by management (Weiss, 1987). One strategy is to withdraw from coordinating with other human service organizations. This strategy is very closed and fails to recognise that organizations are often operating within an uncertain environment (Halpert, 1982). This environmental uncertainty should motivate organizations to coordinate rather than to limit interactions with other human service organizations (Halpert, 1982).

There were difficulties in organizations working together. It took time to understand each other's role within the team. There was a need to determine whether the objectives for this group were congruent with the goals of their organization.

(ii) Turf Protection

"Turf protection" i.e. "the process of resisting any possible erosion of established functions and tasks" by organizations limits coordination (Cheers and Martinez-Brawley, 1991, 9). Organizations adopting this approach argue that they are in the best position to serve the needs of a particular user group. When human service organizations assist the same user group without consensus from other groups involved there is potential for conflict (Levine and White, 1961, 598). Competition and conflict are more likely to occur when these human service organizations are operating at less than capacity (Levine and White 1961, 598). Organizations want to hold onto their resource allocation which means survival strategies such as self-protection are adopted (Levine and White, 1961).'Turf Protection' was present but there was a willingness to include each organization within the attempts to improve service delivery. Some organizations were recognised as performing functions that were outside the role of other organizations. Whilst 'turf protection' still exists to a limited extent there is attempts by all organizations to respect each others domain.

(iii) Professional Interest

Professional resistance to sharing work lessens opportunities for coordination (Weiss, 1981). Many professional workers believe they hold the knowledge and skills to work with particular users of the service (Weiss, 1981, 27). In fact, some professionals lack confidence in the knowledge and skills of other workers (Austin, 1983, 5).

They want to control their own work and have no desire to work with other professionals within their own organization or different organizations (Martinez-Brawley and Delevan, 1991). This professional "elitism" can be countered by the use of generalists, or, closer cooperation among groups of different professionals challenging specialization (Weiss, 1981, 27). Indirectly, it also threatens "professional expertise within each area of specialization" (Weiss, 1981, 27).

Service coordination is often viewed suspiciously by professionals within organizations (Weiss, 1981). They see it as a means by which administrators maintain control over them rather than being innovative. Weiss (1981, 27) argues

> Coordination programs seem to them to threaten professional control over allocations of time and resources without much connection to improvements in service delivery (Weiss, 1981, 27).

Professional differences were recognised within the group. Each group has accepted these differences and rather than viewing this as a limiting factor has built on the complementarity of each other. For example, one organizations is responsible for the theoretical input on parenting whilst one is responsible for the 'hands on' input.

(iv) Human Service Providers and Administrators Actions

At times human service administrators and service providers are struggling to meet day to day activities resulting in little time to devote to service coordination (Gans and Horton,1975, Botsch,1988). In these circumstances administrators and workers focus on the internal operations of their organization as well as direct service delivery (Botsch,1988). This lack of interest in service coordination limits opportunities in sharing information and resources with other human service organizations (Beder,1984).

Each service provider 'external' to Bushtown had many other areas of work. The pressure of work meant that less time for some service providers was given to this project than they ideally would have liked.

(v) Limit to Coordination

There is a limit to the degree of coordination that can occur between organizations (Beatrice,1990). Time, energy, use of resources are costs of the coordination process (Weiss,1981). There is a point where the benefits of coordination are outweighed by the costs of coordination (Weiss,1981). Organizations need to maintain focus on their purpose rather than coordination becoming the purpose of their existence. Thus organizations heavily committed to service coordination need to be careful of goal displacement i.e. focusing on the less important goals of the organization at the expense of the important ones (Perrow,1979). Coordination is a means of achieving more effective service delivery rather than being the purpose for an organization's existence.

All organizations were willing to allow workers to have some time commitment to the team. Clearly there were limits on the amount of time that could be allocated by each organization.

7.4 Effects of Human Service Organizations Working Together in Rural and Remote Areas

The effects of working together primarily impact on the users of services, the human service organizations involved and the community and/or region. Each of these groups will be considered separately. The anticipated effects of coordination are often poorly understood by these groups until coordination happens (Weiss,1981). This will be discussed at the end of this section.

(i) Users of Service

For users of services there is an opportunity to gain access to a greater range of services as well as gaining referral to people with the appropriate skills to help them (Beatrice, 1990). In rural and remote communities professionals are often working with non-professional people sharing their knowledge, skills and wisdom with each other enhancing their own work as well as service to users (Cheers,1994). One difficulty in rural and remote communities is the lack of referral sources within the community. In these circumstances users need to be prepared to travel to gain access to services that are often taken for granted in urban areas (Smith,1987; Greaney and Lees,1989).

A greater range of services was able to be offered as well as greater accessibility within a particular area.

(ii) Human Service Organizations

Effectively cooperating enhances positive interpersonal relationships between workers in different organizations (Beatrice,1990). Networking between workers helps in gaining a greater understanding of the different organizations as well as appreciating the dynamics that exist within rural and remote communities (Lynn,1992).

Coordination promotes goal achievement (Beatrice, 1990;Whetten,1993). It enables options for service delivery that without it would not exist (Beatrice,1990). It builds consensus as it provides opportunities to draw in other organizations to share knowledge about how to improve the success of the organization's program (Beatrice,1990). Coordination can be used effectively by organizations to show the sociopolitical leaders that particular services are needed within the community. Coordinating between organizations presents a combined view arguing for financial resources to help meet the need that has been identified (Beatrice,1990). Coordination allows organizations to further resource options which on their own may be denied (Beatrice,1990). This is particularly important in rural and remote communities which may need to take a regional position on some issues to ensure that resources from the central government departments are forthcoming (Cheers,1992).

There is now better networking between the organizations responsible for service delivery to Tarcoola. Collectively these organizations offer a more coordinated and expanded service delivery to Bushtown.

(iii) Community and Region

With improved service delivery there will be less need to "re-invent the wheel" as organizations will be aware of what services are available to the community (Beatrice,1990,50). This will help decrease fragmentation and overlap of services. Politicians and bureaucrats are likely to view this positively as they are the ones who have to make funding decisions about organizations that seem at least on the surface to offer the same services (Cheers and Martinez-Brawley,1991).

Working together helps to promote networking within the community. This enables human service administrators to gain better information and resource awareness for planning of services at a local and regional level (Weetman,1993).

Within the community there is now less overlap of services. Also, in this community there is a more positive community spirit as a result of the services.

8. FINDINGS

The attempts to enhance service delivery to Bushtrown has been a very useful exercise. It has clearly demonstrated the need for human service organizations to work together in order to provide effective services. However, there have been some difficulties in relation to funding, staffing and other "teething" problems that occur when organizations start to work cooperatively In relation to the objectives set for the organizing team there has been attempts to meet needs through the establishment of the Parents group, community involvement in meeting needs mainly through the work of local human service providers and greater awareness of needs from service providers 'external' to Bushtown.

There is still work required to fully meet these objectives and this can be explained by the short length of time this team has been established.

The women in Bushtown are often without their partner for a long period of time. This places considerable pressure on those women as they are solely responsible for the upbringing of their children during these times. There are few outlets available apart from talking to the other women, going to the hotel, or, talking to the nursing staff at the hospital. To add to this scenario Bushtown is remote and isolated from the social support services normally provided in larger towns.

The group established as a result of the team project has helped women of different backgrounds to come together and share their concerns, particularly in disciplining children. This outlet has been invaluable in helping to breakdown barriers between the women. It has also provided them with 'time-out' which has been greatly appreciated by all. The children have also benefited substantially from this time out and have been willing participants in the child care activities.

Responding to the needs of the people in Bushtown has been important. There is now a semi-formal structure established to ensure that services to Bushtown are more effectively coordinated. The commitment to the structure from those involved indicates that it will continue for some time.

The team approach has identified the potential for human services to work together in remote areas. It has provided an organizational framework that could be expanded upon to other remote areas. It is also a framework that could focus on "best practice" issues to remote areas (i.e. practice procedures, framework for service delivery, utilization of professional people). For each organization there were specific recommendations aimed at enhancing service delivery to Bushtown.

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EDUCATIONAL RADIO: A TOOL FOR RURAL CHANGE

Ndubuisi Goodluck Nwaerondu — Canada

ABSTRACT

It has been demonstrated that communication through the radio helps a person find alternative ways of living, raises a family's economic status, motivates the illiterate to become literate, and increases the aspirational level of rural farmers. In the literature, there is a consensus that educational radio is a rich resource of information on farming practices among rural farmers.

This paper reports on an investigation on how educational radio has been used to disseminate agricultural information to farmers in rural communities of Manitoba, Canada. It describes a developed framework for educational uses of radio in the agricultural extension services of developing countries. Finally, it recommends appropriate guidelines for radio's potential uses in the agricultural extension services of developing countries, and as a tool for discussing issues affecting rural communities.

EDUCATIONAL RADIO: A TOOL FOR RURAL CHANGE

> For it is the special glory of radio that it transcends boundaries, annihilates distance and creates a stronger sense of national unity and international brotherhood
>
> -Canadian Broadcasting Corporation, 1941

Radio has been used extensively as an educational and informational medium in both developed and developing countries. Published reports confirm that radio has supported educational and informational programs in a wide range of subject and topic areas, and in many countries.

Educational radio has been employed within a wide variety of instructional design contexts. In some cases, it is supported by the use of printed materials, by local discussion groups, and by regional study centres. It is sometimes designed to permit and encourage listener reaction and comment. Infact, in some cases, there is provision for the audience to raise questions and to receive feedback.

The purpose of this paper is to report on an investigation on how educational radio has been used to disseminate agricultural information to farmers in rural communities of Manitoba, Canada. It describes the developed framework for educational uses of radio in the agricultural extension services of developing countries. It also recommends appropriate guidelines for radios' potential uses in the agricultural extension services of developing countries, and as a tool for discussing issues affecting rural communities.

DESIGN AND PROCEDURES

The design and procdures followed for this study were that of qualitative methods ascribed in part by Lincoln and Guba (1985), Miles and Huberman (1984), Carney (1983, 1972), Bogdan and Bilken (1982), Patton (1980), Glaser and Strauss (1967), and modelled in part by Woodley (1984). Specifically, this study followed the same procedures as Woodley's doctoral dissertation.

The sample for the study was drawn from Manitoba, Canada and consisted of fifteen communication experts who have used radio to spread agricultural information to farmers in rural communities. The format selected for the study was that of in-depth structured interview and review of the related literatures.

A six section *structured interview questions - 'interview guide'* - was developed, pilot and field-tested, and used to conduct the interviews. Although the guide contained structured questions, the interview format was open-ended in that the respondents were free to answer in whatever way they felt appropriate. However, the responses were guided by their experiences and practices as communication experts.

After the interviews, transcripts were made for each one, and a summary of each interview was written as well. These were mailed out to the respondents for verification and qualitative validation. Following this, "displays" - summary charts and tables (Miles and Huberman, 1984) - were constructed and a collective summary of all interviews was written. Analysis of the data took place thereafter.

MAJOR FINDINGS

Bearing in mind the limitations of the investigation and of generalization, the findings of this study are , by design, inconclusive in and of themselves. However, from analysis and synthesis of the generated data, it is possible to identify a number of key findings. These findings applied to the three main questions of the study, and the five sections of the interview guide.

Regarding the first question, it was found that the interviewed Manitoba communication experts do not use radio to educate but to maker farmers aware, to remind and to inform farmers in rural communities. It was also found that the purpose of disseminating information was two fold:

a) to provide 'timely', 'up-to-date', 'accurate', 'useful', 'technical' and 'how to do' farming information; and

b) to improve 'farming practices and market decisions', 'farm management ability', 'quality of life', 'income', and 'standard of living' on the farm. (Nwaerondu, 1986, p 250)

With regards to the 'how' of information dissemination, it was found that:

1. Manitoba Communication experts plan radio programmes "cooperatively" and sometimes, in consultation with the target audience. Most of the respondents in the study indicated that they involve the target audience during the planning processes. Although mostly indirectly and informally, these involvements varied and ranged from consultation with experts and specialists in the field to cooperative efforts of agricultural organizations.
2. Manitoba Communication experts produce radio programmes by following four major steps. These steps follow two main routes and are preceded by identification - needs assessments and research.
3. Manitoba Communication experts deliver information by, unconsciously, following the good folklore practice of "INTRODUCTION-CONTENT-SUMMARY." Also, the participants in the study professed the viability of interview and discussion formats of delivery; and the use of print media in conjunction with radio programmes.
4. Manitoba Communication experts evaluate radio programmes informally with orientation towards feedback. Since radio is not used for educational purposes, most of the respondents evaluated their programmes informally. In this case, the results were believed to be mainly used for programme improvements.
5. Manitoba Communication experts made some relevant and reasonable recommendations for the educational uses of radio in the agricultural extension services of developing countries. In their recommendations, five significant characteristics that must be taken into consideration when programming for farmers in rural communities of any developing country were identified. These characteristics were: simplicity, community involvement, indigenosity, Farm Radio Forum approach and multi-media approach. The respondents in the study professed the indispensability and viability of these characteristics in any educational radio programming, especially for illiterate and neo-literate rural adults.

Concerning the second research question, it was found that the agricultural extension services of developing countries has used radio to educate, and to spread agricultural information to farmers in rural communities. In general, the study seemed to confirm McAnany's popular discovery about "radio's role in development." According to McAnany (1976), there are "five strategies of use" for radio, namely:

1. open broadcasting: the unorganized audience
2. instructional radio: the organized learning group
3. radio rural forum: the decision group
4. radio school: the nonformal learning group
5. radio and animation: the participating group

These stratigies have been used extensively in the agricultural extension services of many developing countries.

In particular, the reviewed related literature and the described projects revealed that the agricultural extension services of developing countries use radio for a variety of purposes. The "how" or "strategy" of these uses depended upon many factors and attributes such as the purpose, the context, the society and its political system, the organizing body, the abundance or lack of needed resource materials and the educational level of the target audience, to name but a few.

From the foregoing, and concerning the third research question, it appeared that the researcher (or any experienced educationally conscious individual) cannot specifically and accurately state "how" Nigeria and other developing countries can use radio to educate and disseminate agricultural information to farmers in rural communities. Because, any potential guidelines for educational uses of radio has to be culturally bound, politically bound, contextually bound, purposely bound, needfully bound and organizationally bound. For these reasons, the researcher feels that any developed guidelines must be tentative and subject to adoption, modification and adaptation to each society's circumscriptions.

RECAPITULATION

The purpose of this conclusion is to summarize briefly the facts brought out in this study which may assist potential users of educational radio in developing countries. From the study, it can be concluded that:

1. The use of committees in which each concerned segment of the society/community is represented at various stages of the plan, production, implementation/delivery and evaluation processes of radio programming is effective, and more desirable.
2. Various forms of programme production such as drama, panel discussions, interviews and debates add variations in modes of presentation and thus, vitalize participants interests.
3. The length of educational radio programmes should be 30 minutes, maximum to be 45 minutes with intermittent breaks. Also, the broadcast times should depend upon the farming practices, seasons of the year, country and may be different for different farmers.
4. Advance preparation and production of programme plans and guides aids readiness.
5. Human interaction is necessary for adoption and adaptation of any innovation.
    a) Group radio listening followed by group discussion is more influential in changing attitudes and beliefs toward innovation.
    b) A mixture of radio programmes with home visits by agricultural extension agents and other related specialists

improves communication, learning, retention of information and provides feedback

c) Two-way flow of information improves learning and retention of information.

6 The use of radio in conjunction with other media such as prints, posters, slides and person-to-person contacts enables adequate coverage of subjects and provides reinforcement

FRAMEWORK FOR EDUCATIONAL USES OF RADIO

The significance of this study was to establish a framework for educational uses of radio in the agricultural extension services of Nigeria and other developing countries. It appears that this study is fruitful since it is now possible to provide a tentative framework for consideration.

A five phase framework is proposed for educational uses of radio in the agricultural extension services of Nigeria and other developing countries. This section describes the components of each phase.

Phase 1: NEEDS ASSESSMENTS.

The needs assessments phase of educational uses of radio should determine the gaps between current use and required (or desired) uses (Kaufman & Stone, 1983; Mayer, 1986). It should attempt to answer the following questions:

> -where are we going? (or what are we to accomplish?); and
> -why are we going there? (—and, how far is it from where we are now?). (Mayer, 1986, p 117)

By answering these questions, the organizers should determine the existed gaps, the targeted destination and the raison d'etre for working towards such destination. These questions should be answered by conducting preliminary research studies and consultations with village chiefs, local community heads, village teachers and other active responsible and recommended individuals. Such preliminary studies and consultations must aim at assessing the specific needs of the concerned society, community, village or rural area, as well as answer the various problems foreseen by the respondents in this study.

Phase 2: PLANNING AND DEVELOPMENT.

Once needs assessments show a green light to continue, the organizers are automatically in phase 2 of the framework. In this phase, a foundation and standing block for educational uses of radio should be laid. To accomplish this, the organizers should form various planning and development committees such as:

a) Advisory Committee: Which will oversee the whole scheme and provide advice as required or where necessary.

b) Planning Committee: which will be in charge of planning and controlling the whole scheme.

c) Subject Committee: which will be in charge of determining the subjects and topics of interest to the target audience.

d) Production Committee: which will be in charge of writing up the scripts, producing study/forum guides and the whole programme. It may consist of subcommittees such as print material producers, writers and audio-producers.

e) Delivery Committee: which will be in charge of organizing listening groups, heading group discussions, overseeing the use of equipment and providing feedback to the planning committee. It may also consist of subcommittee such as village chiefs, secretary convenors, field advisors/teachers etc; and finnally,

f) Evaluation committee: which will be in charge of carrying out on-going formative evaluation, providing continuous feedback for scheme modification and improvements; and carrying out a final-summative evaluation to assess the results and effectiveness of the scheme.

These committees must work cooperatively and in conjunction with each other. They must have a communication network which will enable them to provide a workable timetable for all their activities, responsibilities and coordinations.

Phase 3: PRODUCTION.

If the above two phases are carried out effectively, Phase 3 will be simplified immensively. It then becomes a collection and coordination of ideas and concepts from each committee; and the production of the programmes, support materials and scripts by the production committee.

Of particular significance to the production phase is the subject committee and its activities. This committee must determine the subjects and topics in such a way so as to avoid criticism. This can be done by involving representatives of all concerned segment of the society during the initial brainstorming of subjects. Alternatively, it could be done through consultation and research. In this case, it should focus on the following questions:

a) What problems do people have?

b) What are the solution to these problems?

c) What are the constraints in applying these solutions?

d) What vested interests are threatened by the solutions?

e) What will the solutions cost (the individual,the family, the nation)?

f) What are people's attitudes?

g) What do people believe?

h) What do people do or practise at present?

i) What language do people use when talking about these things?

j) What misconceptions do people have?

k) What are the current and proposed policies of the government?

l) What history is there of previous actions in this area?

m) What regional variations should be considered (problems, solutions, languages etc.)?

(Crowley et al. 1981, p 22)

Phase 4: IMPLEMENTATION/DELIVERY.

As an action phase, the planning and advisory committee is expected to open up the building whose foundation was laid in phase 2. Although the delivery committee has a lot more responsibilities, the success of the whole scheme depends upon effective execution of each committee's responsibilities. The production committee must be able to supply programme guides and support materials based upon advice of the advisory committee and the subjects recommended by the subject committee. The delivery committee must make sure that participants are organized and ready to receive the information. The programmes must be soundly based upon feedback provided by the evaluation committee right from the beginning, and pilot stages to the delivery phase.

Phase 5: EVALUATION.

The effective execution of responsibilities should be determined by the evaluation committee right from the beginning to the end. Therefore, each phase of the processes should be evaluated and provided feedback as to their improvements. The final-summative evaluation will then be done at the end of the project.

It must be borne in mind that these five phases of the framework runs parallel with each other interacts with each other and must be coordinated - like a suprasystem with systems and subsystems - in order to accomplish any predetermined purposes. This can only be done through a suitable communication network which allows every member/committee to cooperate, consult and coordinate the whole scheme. Specifically, this framework must be viewed as a suprasystem with systems and subsystems. The systems are the five phases of the framework while the subsystems are the different activities to be performed by each committee.

RECOMMENDATIONS FOR EDUCATIONAL USES OF RADIO

Based upon the structured in-depth interviews, review of the related literature and described projects (findings, developed framework and conclusions) in the study, it is possible to make some recommendations for consideration. Thus, for any educational or impact-participatory information uses of radio in the Agricultural Extension Services of Nigeria, and other developing countries, the researcher recommends the following:

1 **Consideration of the developed framework for educational uses of radio.** This framework views educational uses of radio as a suprasystem with systems and subsystems which must be planned, organized and coordinated in order to accomplish a predetermined purpose. The systems (e.g. plan, production, etc.) and subsystems (e.g. organizing listening groups) must be interrelated with each other, and must provide continuous feedback for modification and improvement of the suprasystem. In this framework, the processes of using radio to educate is viewed as a ' science of organizing and organization.'

2 **Application of the five significant characteristics recommended by the respondents.** As has been explicated through reflexivity literatures, these characteristics are very indispensable, especially when programming for illiterate and neo-literate adults. Experience gained from this study indicates that their application will enhance any educational radio programme and thus aid the accomplishment of project objectives.

3 **Educational Radio Handbook or Guide be produced.** For effective utilization of radio as an educational medium, it is desirable to have printed words to act as a guide, advance organizers and a reinforcer. This approach was used in Ghana, India and the Dominican Republic and has proved to be a necessity. Hence, for educational uses of radio in the agricultural extension services of Nigeris, and other developing countries, it will be necessary to provide a handbook which will contain:

a) The objectives of the project and each individual programme;
b) Materials of use to participant as well as group leaders;
c) Specific suggested supplementary reference materials such as books,papers and contact persons;
d) Specific suggested supplementary activities/practices;
e) Comprehensive outlines of subject matters to be covered during each broadcast;
f) Specific suggested methods of group preparation before the broadcast;
g) Questions and ideas for discussion; and
h) A calendar indicating the date and name of the broadcasts to be received.

This handbook must be provided to each participants ahead of time. Inclusive in this havdbook should be a special guideline for group leaders or field teachers. It should include:

a) Preparation to be made for the broadcasts;
b) Activities to be used during the broadcasts;
c) Follow-up activities after the broadcast;
d) Methods of organizing for listening; and
e) Use of sound equipment (radios).

4 **Systematic training of producers and field organizers/teachers.** Irrespective of the background and experience of programme and material producers, field organizers/teachers, and other involved individuals, it is absolutely necessary to organize some 'pre-service' or 'in-service' training for them (FAO,1977). This training should aim at creating awareness and understanding of the aspects of rural development, effective utilization of educational broadcasting, providing clear operating procedures, ensuring that each participant is clear about their responsibilities and authorities, and that all involved agencies or their representatives understand what their roles are and what is expected of them.

5 **Vernacular (or local dialects) and competent vernacular facilitators should be used.** It will be ill-advised to use English or any foreign language for either the radio programme or group discussion when most of the people really relate better to a tribal language of some kind, because the effectiveness of any rural radio programmes should depend essentially on the clarity of voices, exactness of the presented text and speed of presentation. Furthermore, the use of local dialects should account for regional peculiarities and differences with respect to programme preparation and production. This approach has proved to be successful in Ghana, India, Benin Republic and many other developing countries.

6 **Each radio programme be recorded on tapes and made available to absent participants.** Since everybody in the rural areas is not punctual, nor healthy at all times especially in developing countries where the notion of time is valueless, it would be wise to record the programmes on tape. This could be done by group leaders or organizers. The tapes can be used for various purposes: for the individual active participants who were absent; for young groups of farmers, clubs and associations who might be interested, and for reinforcement purposes.

7 **The maximum length of any educational radio programmes should be forty-five minutes.** Because of the limited attention span and the inability to retain verbal information for a longer period of time, it is hereby recommended that the length of educational radio programmes be thirty mninutes, maximum to be forty-five minutes with intermittent breaks and discussions as in the case of Radio Santa Maria.

8. **Adoption and adaptation of the modified ten steps of launching a campaign developed by Crowley, Etherington and Kidd (1968) in their Radio Learning Group Manual.** These steps are based upon practical experience in Tanzania and Botswana. Although subject to adoption, modification and adaptation because of the various societal circumscriptions mentioned above, these steps have proven to be relevant and indispensable. It has been used in this way by many developing countries.

9. **Considerations of the important lessons learned from several Radio Learning Group (RLG) Campaigns.** These are:

> a) Get an early agreement among all concerned on the how to plan and run the campaign.
> b) Work out clear operating procedures that suit your situation. They can never be too simple.
> c) Be clear about who is in charge and about the limits of his or her authority.
> d) Make sure you have sufficient staff - listen to them and keep them fully informed.
> e) Make sure that all agencies involved understand what their role is and what is expected of them.
> f) Make sure that the campaign (or project) has enough money and the expenditure is properly accounted for. (—)
>
> (Crowley, Etherington & Kidd, 1968, p. 42).

10. **Finally, adherance to the above conclusions, proposed framework and recommendations.** It is the researcher's belief that if the above conclusions, proposed framework and recommendations are carefully studied, adopted, modified and adapted to each potential users culture, context, need, political and organizational structures, the educational or impact-participatory purposes of using radio must be fully achieved. To put it in another way, permit me to borrow this idea from Michael Neil (1981) which says:

> ..., before you "adapt", listen to your mother tongue. Learn your own people's games. Observe you people's technologies, listen to them describing their functionings, then, do get inspired by the above [framework, conclusions, and recommendations] ...(p.96).

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HOW "GREEN" WAS OUR VALLEY?
RESPONSIBLE CORPORATE CITIZENSHIP — ONE NIGHT STAND OR LASTING RELATIONSHIP?

David Pargeter and Harvey Miller — Australia

ABSTRACT

This paper addresses the interface between micro-economic reform and the need for responsible management of social change.

It focuses upon the contemporary experience of massive restructuring in the power generation industry of the Latrobe Valley. This region, a heavily industralised, landlocked rural community in Eastern Victoria, was heavily dependent upon the power generation industry as the major employer in the area, and now has been forced to become more structurally efficient not only in terms of economic viability, but also work practice.

The paper raises a number of issues relating to the seeming incongruent demands of economic rationalism and effective social welfare policy.

The unhealthy co-dependent relationship between a State Government instrumentality and an urban-rural community is examined, and the economic and social impact of restructuring is considered in relation to social planning issues. By taking Scott and Jaffee's model of "managing organisational change" and applying it to the management of social change, we present an alternative approach to implementing change in communities affected by major social and economic restructuring. Finally, it draws conclusions about more effective consultative processes that might be utilised in achieving just and equitable solutions to economic and social dislocation.

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The Family Research Action Centre is one of eleven national agencies, sponsored by the Federal Department of Human Services and Health under the Program of Services for Families with Children. The mission of the Family Research Action Centre is to improve the life chances and opportunities of families and their individual members, through programmes of research, community education, resourcing and advocacy.

SETTING THE SCENE

Like many other regions in Australia, the Latrobe Valley developed out of a particular major industry base, namely that of Brown Coal Mining and Power Generation. A certain kind of history and culture has emerged out of this industry, shaping the way that generations of residents have thought and acted.

It is unique in as much as it is the only region in Australia to have actually mined the land on which an original township (Yallourn) once stood. It is significant to note that this event still looms large in the memory of many residents who had no option but to leave their homes and be re-located. This was especially painful for those migrants who had arrived to work for this industry and had put down their first 'roots' in to Australian soil, in that place. Even this major event failed to signal to the surrounding community that the relationship between it and the power industry was changing.

Other 'seismic activity' was detected in 1986 when extensive Employee Surveys and other strategic evaluations filtered through the industry. The solvent of change slowly and relentlessly began its task of 'ungluing' the structures which had bound it and given it cohesion. The process spanned several years and resulted in fragmentation of the industry into distinct yet component parts. Major surgery quickly followed whereby aspects of the industry were amputated, and prostheses attached in the form of external contractors.

The whole process of change and industrial reform has resulted in an industry of 11,000 employees being reduced to one which currently employs 3,900. The employment trends for the period 1986 – 1993 are shown below:

INDUSTRY	1986	1993	JOB LOSSES	% CHANGE
Agriculture,Fishing, Hunting	171	79	92	53.8
Mining,Electricity,Gas, Water	12,149	6,399	5,750	47.3 %

Wood Products, Pulp, Paper, & Forestry.	1,912	1,811	101	5.3 %
Engineering	2,144	1,258	886	41.3 %
Manufacturing - Other	2,708	1,695	1,013	37.4 %
Construction - General	1,507	1,471	36	2.4 %
TOTAL	20,591	12,713	7,878	38.3 %

The effects of this sustained shift in the nature of the relationship between the industry and the community have been pernicious, to such an extent that they were neither planned for nor realistically anticipated. An already difficult situation was greatly exacerbated when the rate of change was accelerated beyond the community's capacity to respond.

'IN A NUT-SHELL'

The labour shortage caused by the 2nd world war accelerated the pace of change in the agricultural sector. Mechanised farming altered the ethos and structure of rural life across Australia. Today's experience of change however, is not national to the same degree. Industry policy and micro-economic reform has meant that some parts of Australia have born the brunt of change for the nations' sake. The Latrobe Valley is one such community; others include: Whyalla, Broken Hill, Albany, Bundaberg, Hunter Valley, Wangaratta. Some of these communities have been able to access Industry Adjustment Plans and work through the effects of the changes[3], the Latrobe Valley has not been one of them.

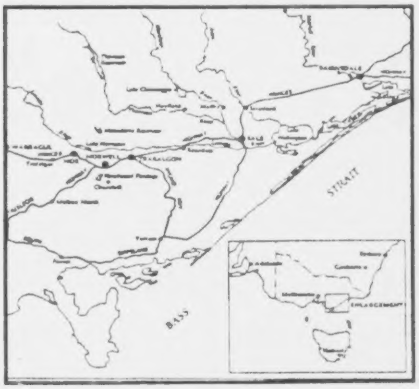
When viewed nationally the impact of structural change appears to have been minimal. The results of a 1993 study conducted by the Economic Planning Advisory Council suggest that approximately 1% of the fall in employment can be attributed to structural change[4]. This averaging out of the net effect somewhat disguises the very real impact of structural change on urbanised rural communities.

This story is about how one community made up of several sub-communities reacted to the changes forced upon it by Government policy and micro-economic reform.

WHERE IS THE VALLEY – GEOGRAPHICALLY SPEAKING ?

The Latrobe Valley is a corridor of small cities about 150 km south east of Melbourne (See Fig 1). It has a population of approx. 68,000. The three major cities of Moe, Morwell and Traralgon form the hub of the Valley community which is surrounded by a number of satellite townships.

LATROBE REGION



Predominately a rural dairying and grazing area the Valley has an abundance of natural resources in the form of forests and coal. Quite naturally this lead to the development of a number of associated industries, like power generation and paper manufacturing. Through the years since 1927 there has been a succession of power station constructions, with each generation of power station embodying the latest technology and reflecting the trend away from labour intensive industry. The purpose of this paper however is not to 'log' the structural changes but reflect upon the social impact of specific Government policy and consider the nature of the symbiotic relationship which exists between major industry and the communities which are encouraged to rely upon them.

THE NATURE OF CHANGE

The following discussion emerges out of many years of personal involvement in two particular fields. Firstly, that of assisting organisations in their search for structural efficiency, and secondly, developing various forms of organisational intervention strategies at the individual, group and corporate level.

It is worth noting that unlike many other industrialised countries, Australia appears to display a preference for down-sizing as a tool for restructuring. 'Right sizing' as it is so euphemistically described, is often the first strategy to be employed rather than the last. It has become apparent in recent years that it is simpler and easier, from an economic and business performance perspective, to shed jobs than it is to change practice. This preferred method has also revealed that many organisations as well as communities are ill-equipped to manage the human side of change.

This kind of situation is magnified when the relationship between a major industry and the community is so symbiotic that a critical change in one critically effects the other. This is a key feature of this particular paper, because it raises the question of responsible and planned management of change. It also raises the important question of decision making processes and whether the singular approach of economic expediency is an appropriate one.

THE LANDSCAPE OF GRIEF

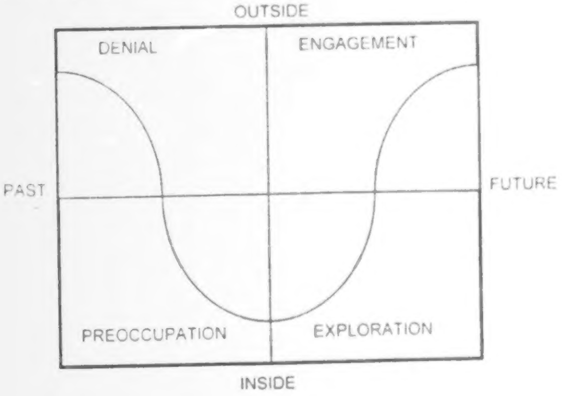
A popular understanding of Economic Rationalism, but not necessarily the most accurate one, is built upon the notion of the 'bottom line', that unless an activity has a direct economic value then it is in essence valueless. This particular benchmark for human endeavour is by definition narrow and restrictive and in complete contrast to the prevailing and dominant culture of the power industry prior to 1986. Before that time the workforce enjoyed a comforting sense of well-being and security. In 1984 the Latrobe Regional Commission was established principally to plan for, and co-ordinate, what was expected to be a continuing period of growth and prosperity for the region[5]. It was envisaged at one stage that about 21 power stations would be operating in the region[6].

It was anticipated that power station construction would continue through the 80's , providing employment well into the 21st Century. It is not surprising that many were lulled into what is tantamount to feelings of false security. Historically speaking, many had sought employment within the power industry because of its culture, career pathing, and permanency. It was not uncommon to find three generations of families working at the same time in the same place. It is worth noting that the geographical closeness of the sub-communities and their proximity to the workplace meant that there was little dispersion of employees. Power workers were intrinsically linked after hours through their participation in community life, e.g., football clubs, school, and other leisure pursuits in general.

One feature, which only now is being used to promote the region, is the nature of the power industry itself and the types of skills which are unique to it. The subtle message in this point though needs spelling out – where do redundant workers, with unique industry specific skills, find work?

In working and thinking through the issues associated with industrial and community grief we have drawn heavily upon the Westburg Grief Curve, adapting it to accommodate some of the special features of the loss associated with structural change. Whilst adapting the 'curve' to our circumstances we discovered a similar model was being used by Scott and Jaffe in a Practical

Guide for Managers managing organisational change. In referring to our own model we wish to acknowledge the work done by Scott and Jaffe.



In order to discuss the model briefly without creating cumbersome language, we will focus on the subject of community as it relates to the Latrobe Valley. The model infers that there are four significant phases which communities can go through when experiencing, and then adjusting to change. It is helpful to see the whole change process as a journey along an unfamiliar path, and there are times on the journey when the twin stimuli of fear and opportunity create inertia and motivation. This is the human side of change that is rarely taken into account by the economic rationalists of our time who appear to place efficiency before sufficiency.

Phase 1: DENIAL

It is common for people to react to change by trying to pretend that the change is not actually taking place. Grief counsellors describe this response as denial and is proportional to the degree of loss either experienced or anticipated. Although grief is an internalised response it is generally triggered by factors 'outside', that is, external events. The graph illustrates that the moment a grief response is activated it moves forward in time and commences the process of internalisation.

Phase 2: PREOCCUPATION

Is characterised by a period of preoccupation as the community comes to grips with what the change actually means and its implications for the present and the future.

Clearly, the duration of each phase is unpredictable, but it doesn't take to much insight to see the dangers inherent in either rushing the change process or stalling it. Rushing change gives insufficient time to absorb and consider the implications, stalling can foster irrational resistance to change, regardless of any benefits which may flow from the change to the community.

Phase 3: EXPLORATION

This phase marks a significant transition from the internal to the external. It indicates a degree of searching and exploration, a movement however tentatively, toward the future. It has been our experience that there is every possibility of a loop being generated within this part of the curve, as the community explores, evaluates, internalises, recedes and explores again. This appears to be healthy since it reflects movement based on a harmonising of emotion, reason, and risk.

This phase of the journey demands a good deal of social planning time, as the need for alternative 'pathways' is great, e.g., re-training, vocational guidance, new enterprise initiatives, identification of opportunities etc., etc. The absence of any cohesive infrastructure within Human Resource provision means that much of the community is without the kind of services which facilitate progression along the journey of change.

Phase 4: ENGAGEMENT

Evaluations of training programs associated with managing change have shown that for many people the process of adjusting to change was severely thwarted by the lack of real option5 The absence of clear stepping stones meant that many were unable to disengage from the old by engaging with something new.

The following quotation illustrates the point. *"When I was told that I was surplus, I felt as if I had been disconnected from the whole thing. What should I do now? It's like being lead through a door into a room where there are no other doors or windows. Once I'd stepped into the room the door slammed shut behind me, and then it was locked from the other side. There was no way back and no way forward. I was left in the room with no-one but myself. I've been in there ever since". (George F. Yallourn Works area.)*

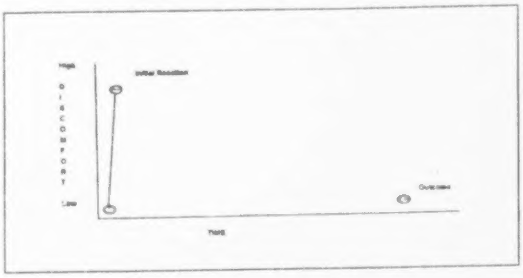
Interview after interview has shown that transition is only possible when real alternatives appear on the horizon. It is equally true that real alternatives do not just happen, they have to be created, nurtured into being, and developed to their fullest possible potential. Too many decisions were made and implemented with little or no regard to their implications.

TO INTERVENE, OR NOT TO INTERVENE, THIS IS THE QUESTION !

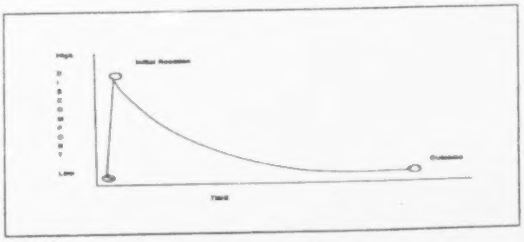
It was naively presumed by industry that micro-economic reform was the domain of industry, and that consultation with the community was not necessary. Consequently, the community was excluded from participation in the change process and almost by default was placed in the position of reacting to the changes after they had taken place. Had the community in partnership with the industry been able to plan for the changes, it would have been able to create the social infra-structure necessary for facilitating transition from the old to the new. (It is worth recording that over this sustained period of change not one day was lost due to industrial action. Some have accused the Trade Union Movement of capitulating to the inevitable, whilst others have applauded them for their responsible adjustment to macro-economic reform). The following graphs illustrate how strategic intervention into the change process can facilitate accelerated recovery and a commitment to the future.

GRAPH 1 **Shock reaction**

The graph represents the kind of reaction one expects to accompany news of significant change. This is certainly the way that many in the community responded to news of massive restructuring in the power industry.



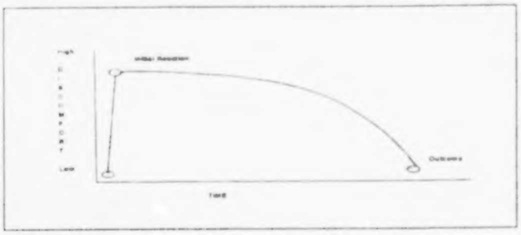
GRAPH 2 **Immediate recovery**



If the news is received as 'good' news, with the implications understood, and the effects minimal, there is every chance that recovery will be fairly immediate. Many within the community and the industry itself saw the change in terms of opportunity and challenge, as well as necessary for industrial survival.

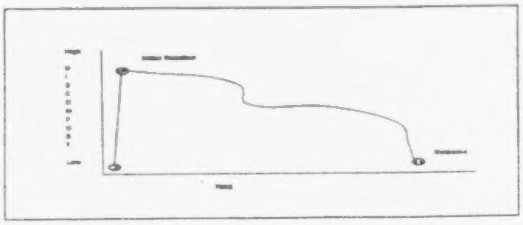
GRAPH 3 Recovery without intervention

This graph illustrates the possibility of sustained discomfort, characterised by resentment, anger, frustration, and feelings associated with betrayal. Implicit in this graph is refusal to accommodate the change. This was certainly the experience of the majority of those affected by the changes.



GRAPH 4 Recovery with unhelpful intervention

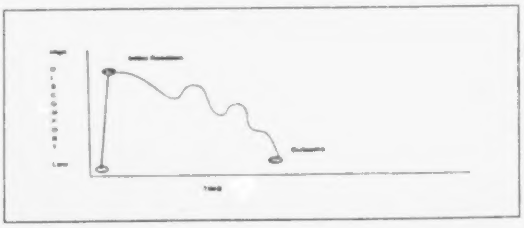
The early phases of the downsizing were characterised by mis-information, uncertainty, mixed messages, and false hopes. For example, one section was told that it could avoid being contracted out if it became more viable as a 'unit'. All staff amended work practices, increased efficiencies and became quite excited about the whole process. They achieved their target, and in doing so increased their 'attractiveness' to a private contractor who bought them out any way. During this period change was being accelerated and the level of disruption unprecedented. People were being motivated out of fear and insecurity, and experiencing multiple relocations. It is not difficult to understand how discomfort levels are sustained and at times exacerbated.



GRAPH 5 Recovery with helpful intervention

As the internal process of change gained momentum, many people began to voice their concern over the way things were unfolding. Community resources, stretched at the best of times, were unable to cope with the worst of times. The infrastructure was not in place to deal with the extra demand for services like:

Financial Counselling
Training for Change
Retirement Counselling
Family Counselling
Financial Planning
Life Management Skills
Small Business Skills
Crisis Counselling



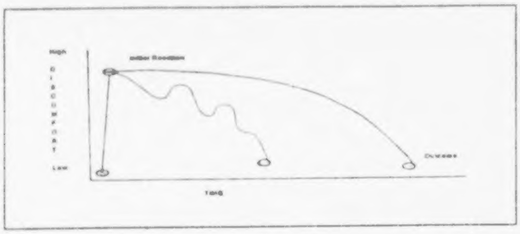
Grief Counselling
Unemployment Services
Etc, etc, etc.
Recreation Services
Career Counselling

Through the provision of these community and industry based services people are better able to manage themselves as they navigate their way through the unknown.

GRAPH 6 The spectrum of response

The difference between the 3 experiences illustrated in graphs 3, 4, & 5 represents a reduction in the levels of discomfort, and more significantly, a reduction in the amount of time taken to recover from the change and to respond to the future. It has clearly been our experience that without the necessary co-operation between the community and industry, to plan and manage the changes, our recovery has been delayed and opportunities missed.

Because of the long-standing relationship between the power industry and the Latrobe Valley community, the consequent counter-dependency demanded a greater degree of corporate citizenship and responsible change management processes.



CONCLUSIONS

It is clear from our experience that the length of the relationship between an industry and a community does not guarantee the quality of relationship necessary for effective and responsible change, especially those changes which so dramatically impact upon the general life of a community. The processes chosen by the industry reflect a fear of public consultation which resulted in decisions being made from an extremely narrow perspective.

It is fair to say that any savings in costs are illusory when equated with the major social dis-functioning that has occured as a result of the changes. Numerous social agencies, already poorly resourced were swamped by an avalanche of needs that they were unable to meet.

> "For our own past is *covered by the currents of action,*
> *But the torment of others remains an experience*
> *Unqualified, unworn by subsequent attrition.*
> *People change, and smile: but the agony abides.*"
>
> T S Eliot

Economic Rationalism and Social Policy

Numerous authors have described recently the national and international trend toward the political "new right,"[6] with particular emphasis upon the implications of such political agenda for economic policy. Pusey in particular argues that in national terms, "Canberra (has been) swept by a locust strike of economic rationalism."[7] While his colourful description might be excessive, it is clear that at national, state, and local levels there has been a conscious shift toward policies which are "economically rational."

Pusey argues elsewhere that the basic thrust of the economic rationalist perspective is for governments "to get out of the way and let the market forces deliver their own economically 'rational' solutions."[8]

The basic and underlying assumption of such an approach is not new. Adam Smith's Wealth of Nations is grounded in the assumption that if an exchange between two parties is voluntary, it will not take place unless both believe that they will benefit from it. Milton Friedman claims that Smith's insight was nothing short of brilliant.

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> Adam Smith's flash of genius was his recognition that the prices that emerged from voluntary transactions between buyers and sellers – for short, in a free market – could co-ordinate the activity of millions of people, each seeking (his) own interest, in such a way as to make everyone better off.[9]

Friedman's conclusion about the role and place of government aptly describes the core aspect of economically rational policies. He correctly argues that our society is what we make it, and that our humanity does limit the alternatives available to us. But he then concludes:

> ... none prevents us, if we will, from building a society that relies primarily on voluntary co-operation to organize both economic and other activity, a society that preserves and expands human freedom, that keeps government in its place, keeping it our servant and not letting it become our master.[10]

At a national, and more specifically in the context of this paper, local level, government and quasi government organisations have attempted to shift the burden of service provision on to the private sector. We have seen pressure to cut welfare spending, and the reduction of other areas of public spending, particularly in the areas of health education and community services. We have seen the de-regulation of the private sector and the labour market, efforts to shift the tax burden away from business and on to wage and salary earners in the form of consumption taxes and ($100 levies), and assumptions that the 'market' will produce its own preferred solutions to the problem of unemployment.[11]

With particular reference to the Latrobe Valley, the justification for such an emphasis has been to respond to the need for macro and micro economic reform, and in particular the structural adjustment needed to make the manufacturing sector and the rural industry internationally competitive. Justification for these economic reforms is expressed in terms of "eliminating waste, inefficiency, and feather bedding; saving the taxpayer's dollar; and streamlining the public sector."[12]

It is clear that in such a thrust, primary emphasis is given to "the economy," and that consideration of the social and political order is relegated to a less significant and less central role.

There are a number of underlying assumptions about an economic rationalist approach to responding to the economic and social needs of a society.

The first is that what is good for the economy is good for the community. There is one sense in which such an assumption is correct. A poor economy with high levels of inflation, high levels of unemployment and adverse trading relationships does not correlate with high standards of living. However an assumption that high levels of investment and company profits will automatically be distributed to benefit the community is not borne out by a comparison of shifts in wages and profits between 1975 and 1988:

	% of share of National Income[13]	
	Wages	Profits
1975	68.9	13.1
1988	58.4	15.3

Similarly, Graycar's comparison of welfare and transfer payments between 1966 and 1986 strongly suggests that market forces alone do not ensure adequate income for all.[14]

	1966	1986
% of people over 16 receiving transfer payments as their main source of income	10.8	22.5
Social security and welfare payments		
% of Gross Domestic Product	4.4	8.0
% of Federal Budget Outlays	17.8	27.4
Social security recipients per 100 employed persons	17.9	38.8

A second underlying assumption about the benefit of primarily employing an economic model to respond to social need has to do with individual initiative. Economic models such as those espoused by the new right assume a capacity on the part of individuals and the corporate sector to participate freely and equally in the processes of economic reform. The Federal Government's **White Paper on Employment**[15] and subsequent budgetary initiatives clearly indicates that the playing field is not level and that special attention needs to be given to assisting those who because of age, gender, training or length of time out of work, cannot participate freely and equally in the economic upturn which appears to be emerging. Similarly focus contained in the SANPR[16] initiatives suggests that some regions, and the Latrobe Valley in particular, have been disadvantaged more than others in the current processes of macro and micro economic reform.

In discussing possible responses to the current high levels of unemployment and the damaged social infrastructure of the Latrobe Valley, the role of Government is central. With specific reference to unemployment at a national level, Pusey draws a strong conclusion about the central role that Governments have to play:

> *We should not assume that aggregate economic gains will of themselves do anything to help the unemployed without a binding commitment from the Government to strong redistributive policies.*[17]

However this paper argues that for Government, as well as for industry, the issue is more than economic development or policies of redistribution, important as they are. What is equally important is that serious consideration and strong commitment must be given to processes of consultation and involvement of those affected by massive changes to the social fabric of their local communities, such as restructuring of the economic base of the community, and that planning must be implemented for the social and communal consequences of restructuring.

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4 Minister for Industry, Technology and Resources (1986), Latrobe Region Framework for the Future.

5 Survey of program participants between 1990 & 1993.

6 For instance, Jocelyn Pixley, Citizenship & Employment, Oakleigh, 1993; F Pampel & J Williamson, Age, Class, and the welfare State, Oakleigh, 1992; Alain Lipietz, Towards a New Economic Order, Cambridge, 1992.

7 Michael Pusey, Economic Rationalism in Canberra, Oakleigh, 1991, p. 1 Including for instance the deregulation of the financial markets, the floating of the exchange rate, the opening of the banking system to international competition, privatisation of the airline system.

8 M. Pusey, "The White Paper: Getting the Basics Clear," in Paul Smyth (ed.), The Employment White Paper: A New Social Charter?, Discussion Paper No. 3, Kings Cross, Uniya Publications, 1994, p. 33

9 Milton Friedman, Free to Choose, Harmondsworth, Martin Secker and Warburg Ltd., 1980, p. 32

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11 See Pusey's discussion in "The White Paper," p. 3

12 Pusey, Economic Rationalism, p. 3

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14 Adam Graycar and Adam Jamrozik, How Australians Live: Social Policy Theory in Practice, Melbourne, The Macmillan Company, 1989, p. 2

15 Restoring Full Employment, Commonwealth of Australia, 1993

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WHAT REGIONAL DEVELOPMENT CAN LEARN FROM LANDCARE PRACTICE AND WHAT LANDCARE CAN LEARN FROM REGIONAL DEVELOPMENT PRACTICE

Patrick Morrisey and Craig Mathisen — Australia

ABSTRACT

Landcare is a 10 year funding program, longer than three terms of government. It is a "bottom up" approach with local community groups setting the agendas. It has support from State and Federal Governments and commitment from diverse groups, such as Australian Farmers Federation and Australian Conservation Council.

It would appear that Landcare has everything that regional development needs to reach its full potential. However, after three years of Landcare there are signs of community burnout, uncertainty from Local Government, and the need to undertake more strategic projects which will affect change rather than simply be demonstrations. Once all the 'quick runs on the board' type projects have been completed, then what next?

Regional Development practitioners will be familiar with all these issues. What can the Landcare movement learn from the decades of regional development activity? And what can regional developers learn from a 10 year model of co-operation?

This paper explores the key issues.

CURRENT ISSUES OF REGIONAL DEVELOPMENT

Background Information

Two important issues relative to effective regional development need to be explained at the outset. These are:

1. the Product Life Cycle; and
2. the Time Frame of major stakeholders in regional development.

The Product Life Cycle

Regional development is about creating effective change in economic activity. The process is similar to that of an organisation developing a new product.

Initially, ideas need to be generated. An internal evaluation process decides whether these are "good" ideas or not. Those with the most promise are then investigated and the best is selected for development.

The "rule of thumb" is that for every hundred ideas, just one makes it through to the product development phase. (Compare this with the often demand for every regional development project to be "made a winner".)

After research, development and trial testing the product is launched. This is often the first time that the 'public' sees the result of the expenditure of considerable time and money by the company developing the product.

It is only after the product has been launched that it has a chance of selling and providing a return on the investment. (Refer to Diagram 1)

The "introduction" is a vital component of effective regional economic development, yet it is often not considered by stakeholders.

THE TIME FRAME OF STAKEHOLDERS

Regional economic development, practiced at the community level, can involve all tiers of government and the community. Each of these 'players' have different time frames and agendas, often determined by the political process. These time frames never coincide and often the strategic product development that needs to be undertaken has to comprise, to fit much shorter 'product development' timetables. (Refer Diagram 2)

The Five Stage Regional Development "Game"

Few 'players' in regional economic development give consideration to the time frame/agendas of other players, or the time needed to develop and implement effective economic strategies which will achieve the change desired.

The lack of any long term strategic commitment to regional development collectively by the various tiers of government and the community has resulted in mixed outcomes.

A five stage process has been identified to try to analyse why this community effort does not always reach expectations.

Stage 1 (0 Months)

Public action (meeting/workshop/vision conference) is taken at the local/regional level to stimulate community action for regional development:

- a new government program focussing on regional issues;
- a community itself feeling 'peeved' about current state of the local economy; or
- a community taking a positive role about its own destiny and willing to adopt a preferred futures approach.

Stage 2 (12 Months)

Short term project funding is secured to marshall resources for a local/regional effort at achieving more effective regional economic development and the various stakeholders work together (and also on their own agendas) to achieve results.

The usual first (re)action is to "do something" and "get runs on the board" to show that the project is a success.

Often the focus never shifts from this activity.

Stage 3 (24-36 Months)

Successful implementation, that is, action to "make things happen", relies on voluntary co-operation.

The process usually involves stakeholders from various levels of government and the community. Due to the passage of time, while

DIAGRAM 1 The Product Development Cycle

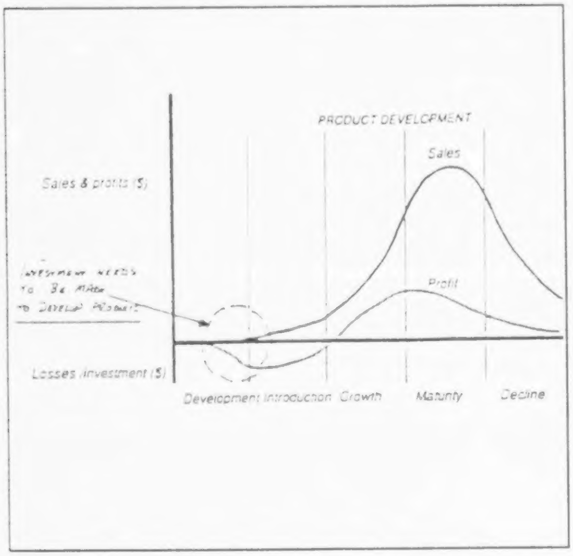
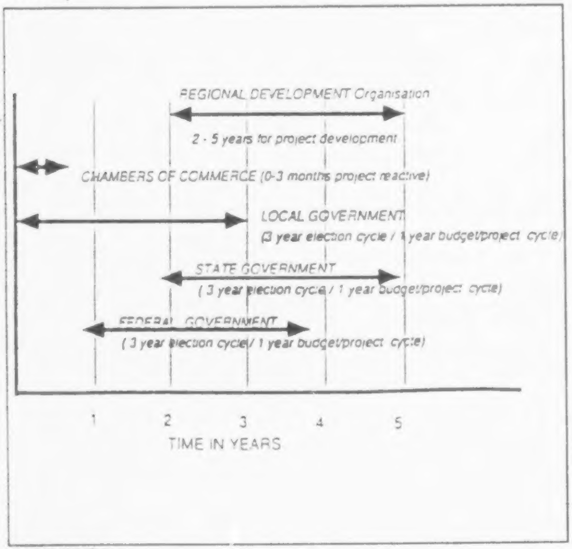


DIAGRAM 2 The Timeframe for Regional Development Activity


REGIONAL DEVELOPMENT Organisation
2 - 5 years for project development
CHAMBERS OF COMMERCE (0-3 months project reactive)
LOCAL GOVERNMENT
(3 year election cycle / 1 year budget/project cycle)
STATE GOVERNMENT
(3 year election cycle / 1 year budget/project cycle)
FEDERAL GOVERNMENT
(3 year election cycle / 1 year budget/project cycle)
1
2
3
4
5
TIME IN YEARS

COMMENTS:

- *Chambers of Commerce tend to be reactive and want quick solutions to existing problems*
- *Governments want 'quick runs on board' for political expediency and timeframes do not coincide*
- *Regional organisations have difficulty developing projects in time frames of other stakeholders or are driven by short term objectives*

the stakeholders (organisations) often remain the same, the participants do not

Elected representatives are either voted out of office or replaced on the development committee to "give someone else a go"; community representatives lose interest or pursue other interests; and staff on short term contracts move on to other career opportunities

This results in a tendency for either:

- new players to be less inclined to accept responsibility as they were not part of the original decisions; or
- the whole group goes 'back to step one' for the benefit of the new person/s

At this stage confusion about direction of the overall process/project development usually becomes public. Dissatisfied players' make public statements which then adds to the growing uncertainty of the lack of tangible 'runs on the board'.

Stage 4 (36-60 Months)

This stage is often the "death" stage of the regional development effort, which commenced with the best of intentions 3-5 years ago

Usually three options arise:

Option 1

The focus of all stakeholders has moved to other issues, due to new policies and new politics

The original objective is lost, all players lose interest, funding ceases and the project ceases

Option 2

The project could be a success and some of the stakeholders see it as "too successful". The threat is reduced by either discrediting the project or reducing funding. Funding ceases and the project ceases.

Option 3

The group undertaking the project fails to consider the need to secure funding past the initial start-up phase. Funding sources decline while expectations rise. There is more pressure to do more with less. This creates internal pressures and so the usual options for what is a volunteer effort is to cease operations

The group runs out of resources when the project is completed and ceases to exist.

Stage 5 (18 Months After Project Ceased)

After about 18 months of inactivity, new players gather at a public forum/vision/workshop/search conference and decide that the community needs to take some positive action.

And so the regional development cycle begins all over again.

GO BACK TO STAGE 1.

WELCOME TO THE REGIONAL DEVELOPMENT GAME!

WHAT ARE THE CURRENT PROBLEMS WITH REGIONAL DEVELOPMENT?

The 5 stage scenario outlined in the previous section highlights the problem of achieving effective regional economic development via the 'bottom up' process. The process relies on continuous co-operation from ALL stakeholders, yet the attention cycle wavers, according to the individual stakeholder.

This 5 stage cycle means that the original objective - more effective regional economic development - is rarely achieved.

Diagram 3 depicts the level of effective economic activity over time from the 5 stage regional development "game".

Diagram 4 depicts what is needed to achieve effective change in communities. This can only occur with a strategic long term approach to the issue of regional economic development.

At least nine reasons can be found why the outcome is not as originally expected.

1 Lack of understanding of the complex nature of regional development (refer to the Product Development Life Cycle).

2 Absence of a shared strategic vision between stakeholders and the need for organisations to be in the simultaneous mode of strategic planning and project development.

3 Absence of clearly defined objectives and methods of participatory evaluation of performance.

4 Lack of understanding of the roles of various stakeholders and the time frames in which they operate.

5 Poor communication between stakeholders, and within stakeholders' organisational structures.

6 Failure to secure operational resources beyond start-up project phase.

DIAGRAM 3

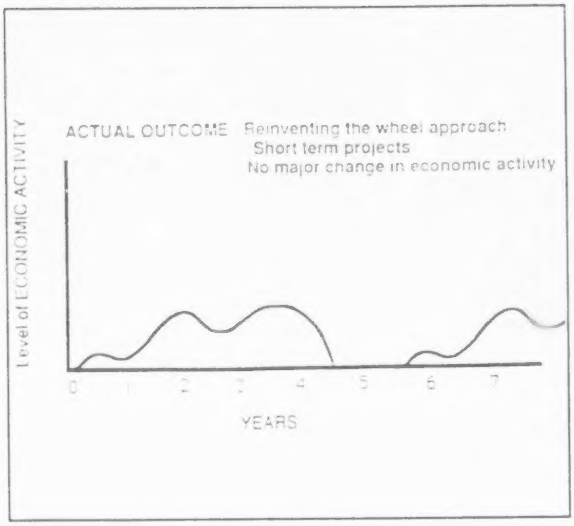
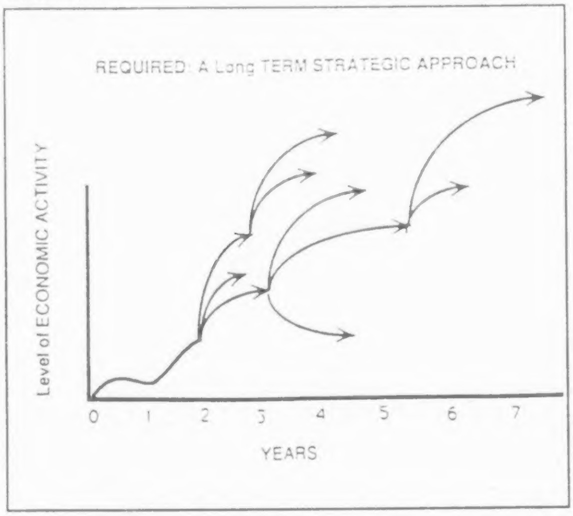


DIAGRAM 4



7. Unrealistic expectations of the ability of certain activities to achieve real change in the economy of the community and generate new prosperity.
8. Lack of adequate supporting resources to service the expectations generated by public workshops.
9. Lack of commitment to the process as well as the projects.

WHAT IS NEEDED FOR MORE EFFECTIVE REGIONAL DEVELOPMENT?

What then is needed for the 'bottom up' approach to regional economic development to be more effective?

The 'missing link' is a strategic framework within which the regional economic process can operate. Such a framework needs to have the capacity to provide for:

- product development resources;
- implementation;
- review and reflection;
- updating and enhancement; and
- short, medium and long term outcomes.

Such a framework should accommodate both 'top down' (government) actions and 'bottom up' (community) actions to maximise financial and human resources for the most effective results.

Three specific actions are identified as necessary for more effective regional development (with reference to the Landcare model outlined in the following section).

1. Long term commitment (at least 10 years) from all players to adequately resource strategic approach to regional development.
2. Acceptance that a healthy national economy is a nation of healthy local economies. (That is, action at the local level is complementary to action at the state/federal level).
3. Provision of skills to all stakeholders to be effective in creating structural changes required and desired.

LANDCARE, A MODEL FOR REGIONAL DEVELOPMENT?

Over the past 5 years Australia has demonstrated what can be done with a National long term plan that is strategically focussed, addressing priority needs and set up in such a way that the community is empowered to influence the way their future evolves.

Landcare, as a grass roots, community driven yet government supported movement is an example of what can be achieved with the right mix of timing, policy, resources and commitment.

The ground work is being laid for another layer of development, that of community rural development.

Landcare started in the late 1980's as a marriage between two unlikely bedfellows, the National Farmers Federation (NFF) and the Australian Conservation Foundation (ACF) with a ten (10) year commitment of support from the federal Government. This became the 'Decade of Landcare'.

Its focus then, and still is to manage the land - to save it from degradation, minimise pollution and to conserve related natural resources (DPI 1992).

Since then it has grown to mean many things to many people. It now embraces a wider audience and is becoming a framework for delivering many National and State government programs. It has become an effective way for the government to jointly manage natural resources in partnership with rural communities.

Just as environmental issues cannot be separated from social and economic factors, neither can farm planning and development be separated from catchment and regional planning and development. From a systems perspective, they are interrelated issues which should be seen and managed that way.

The authors suggest the Landcare model, as a partnership between government and community in promoting and demonstrating better land, water and vegetation management can be used and expanded upon to encapsulate the broader needs of rural communities.

The issues facing the bush are complex and the solutions require a delicate mix of commitment, resources and flexibility on behalf of all parties. The current framework for supporting Landcare groups needs to reflect the broader range of issues rural communities are facing. If Landcare, in its broadest sense, is to secure a permanent presence in the fabric of rural Australia, it needs to be in a position to harness the resources and experience of the regional development domain.

This will enhance the potential for rural Australia to realise the 'preferred future' Campbell espouses (1992) rather than the 'probable future'.

A number of key ingredients are needed that together form a successful mix that is necessary for Landcare to build on to incorporate elements of regional development.

A Long Term Plan

The Decade of Landcare Plans are documents each State, Territory and Federal Government has developed in partnership with the community. They are ten year frameworks of goals and actions with periodic reviews and targets to reach.

A Shared Vision

Riding on a heightened environmental awareness, the Landcare model was strongly supported by the Federal Government due to a shared vision between two (2) traditionally divergent groups, the NFF and the ACF. It had bipartisan support. Everyone agreed, land degradation was Australia's biggest environmental problem. The rural and urban communities wanted to do something about it and an appropriate model was developed.

The Model

Partnership agreements were developed between the Federal and State Governments. A broad policy framework was developed with federal funds available to State and Local Governments, research bodies and community groups to develop projects which promoted and demonstrated better land and water management practices.

A prerequisite for funds was that the development and implementation of projects involved the perceived beneficiaries through community groups. Therefore ownership and commitment was more likely, ensuring a multiplied benefit on the ground.

Project approval and assessment is done in partnership between Landcare group members, agency staff, community members and industry at a regional level.

Facilitation

Another factor in the success of Landcare to date has been the employment of people with a different mix of skills than traditional extension staff. Community facilitators as change agents, can be "the spark that ignites the engine". Groups need direction and leadership to be able to fully utilise all human resources on hand and to help develop a shared vision, so necessary to achieve desired outcomes. An independent facilitator can significantly increase the productivity of groups.

THE CHALLENGES AHEAD

Landcare and Regional Development have a lot in common, yet differ in a number of ways.

The Practitioners

Landcare facilitators, Group Co-ordinators and Community/Regional Development Practitioners are all change agents in a number of ways. They are trouble shooters, motivators, and paradigm shakers.

They are generalists set in a specialist culture.

They make sense of complexity at the coal face and can cut red tape to assist communities achieve their objectives.

More Than Rational Thinking

Landcare is an emotive issue. No-one can deny we must repair our natural environment. Yet repairing our rural communities is more complex and potentially divisive issue.

Ownership

Landcare has the commitment from a wide cross section of society. Farmers, environmentalists and governments all agree. It is in the Governments' interest to have new framework to hand their professional hats on.

Rural and regional development do not have such united appeal. They could be seen as a threat to centrally managed Governments.

Community Capacity

Realistic expectations for rural communities are needed.

Rural Development Practitioners generate expectation within communities that need to be backed by adequate resources from within and outside.

The Future

Landcare is riding on the goodwill of its followers, but for how long?

Stronger links need to be developed between the current framework for groups support and the broader needs of rural and regional communities.

Regional Development Agencies need to develop stronger links with National Landcare Program funding framework.

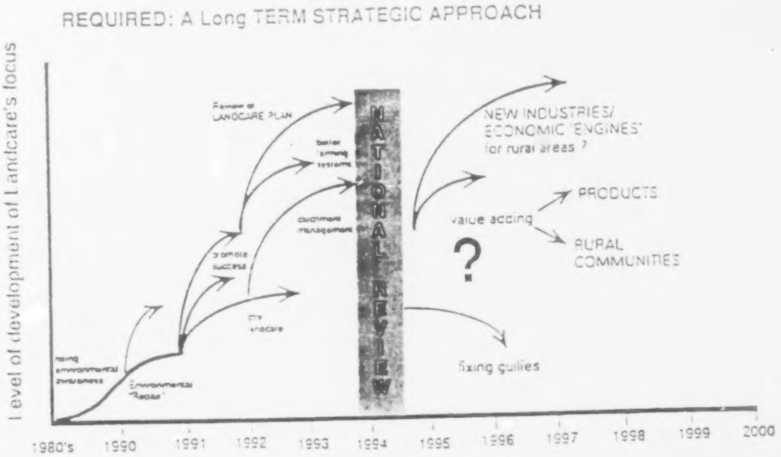
A WINDOW OF OPPORTUNITY ... NOW?

The timing is right for a fundamental rethink of what structures need to be in place to accommodate the needs of rural communities.

Current issues are:

- In Australia a number of National, State and Local initiatives are trying to develop a whole of government approach to rural policy and programs. Successful case studies can demonstrate methods of integration others can learn from.

DIAGRAM 5



- from environmental repair....to ....rural community repair
- continually building on the existing framework
- groups developing around common interests

- Rural repair, that is, positive action to support the fabric of rural communities, is becoming a topical issue, just as land repair was an environmental issue of the 1980s.
- Reports are challenging the capacity of governments to fund urban infrastructure needs and so "the bush" is now seen as a more economically viable alternative to more urban development.
- Regionalisation is focussing attention at the local/regional level rather than one national solution to national problems.
- The focus of agricultural return on investment has shifted from on-farm activities to off-farm such as international marketing and 'value adding' through additional processing in Australia.

The DECADE OF RURAL REVITALISATION (1994-2004) may be a window of opportunity that is ready to be opened.

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MEETING THE NEEDS OF RURAL WOMEN

Margaret Alston — Australia

ABSTRACT

This paper examines the gender order which operates in rural areas and which ensures that women are accorded a secondary status, that their contributions are discounted and that their concerns are trivialised. It addresses the largely unacknowledged efforts of farm women which aid an enhanced quality of life for their families and their communities. The paper then focuses on issues of concern to these women. In particular, the lack of employment opportunities, lack of child care, health problems, lack of services, disquiet about chemicals in agriculture and the assets test provisions on pensions. The paper is informed by a study of farm women undertaken in southern New South Wales in 1991.

When asked how she felt about her life in rural Australia, seventy-two year old Jean looked reflectively into the distance before replying 'Well all I can say is its a man's world and any woman who thinks it isn't is a pickled onion!' (Alston, 1993). Rural Australia is experienced by many women as man's country. It is a place where farm women like Jean are largely invisible in the public arena and where their opinions are overlooked and often ignored. This paper will examine the structural imperatives which operate in rural society to discount women and their contributions and to silence their concerns about many issues which impact on their lives. It will then address some of these issues and look at ways of overcoming some of the difficulties confronting women. The paper is informed by a study of farm women conducted in 1991 (Alston, 1993).

Women are disadvantaged by patriarchal gender relations which dominate rural society and which are reinforced by ideologies of family and 'wifehood' which see women as domestically focussed and which hold women accountable for domestic household labour (Whatmore, 1991). These ideologies act to legitimise patriarchal relations and the subordinate position of women within those relationships. While hierarchical gender relations are dominant in rural society generally, within farming families they are aided by the system of patrilineal inheritance which operates to ensure that men own and control the resources of agriculture and that women are sidelined in farming family systems. The most common point of entry to agriculture for women is through marriage. Because their husbands are often involved in inter- and intra-generational partnerships with kin, women marrying in to farm families may hold an inferior position and be treated with suspicion by extended family members for much of their married lives. Yet farm women are taking a great deal of responsibility ensuring that their families, their farms and their communities function effectively. They take on the lion's share of the unpaid work within their families, they are replacing hired labour on farms as conditions in agriculture deteriorate, they are moving off the farm to take on paid work in their communities to gain much needed income. As well, they are giving time to their communities to ensure an enhanced quality of life for rural dwellers (Alston, 1993). Yet their position is ill-defined, undervalued and often trivialised because what they do is seen as 'women's work' or as a role 'intrinsic to their gender identity' (Whatmore, 1991: 103).

The gender divisions in rural society which ensure a secondary role for women are endorsed by rural media. Macklin (1993) reports on a study she undertook in an Australian rural town she calls 'Garralong'. During a twenty-seven month period from 1989 to 1991 she carefully examined the local newspaper. She found that women are almost always presented in traditional roles and any other work they do is trivialised. They are seen as peripheral to important events, their voluntary work is overlooked and their dependent status ('supermum', 'Barry's wife') is endorsed. The media plays a significant part in shaping public perceptions about the position of women in rural society.

Farm women report that, despite their legal status, their position in rural society is devalued by community members such as bank managers, accountants and stock and station agents with whom they come in contact. Beverley, a fifty-three year old farming partner in southern New South Wales described the treatment she receives from professionals off the farm.

> 'I have trained them that they will be happy to do business with me as I am the person who is answering the phone ... I have had to be assertive especially with the accountant and perhaps two others, but especially the accountant who was initially not prepared to be dealing with the female partner of the farm' (Alston, 1993).

Public positions of power in rural areas, such as local government representation, are predominantly held by men. Women are often excluded from public arenas of power because they are not perceived as serious contenders and because their responsibility for unpaid family work leaves them little time to pursue their ambitions. Kerry, a thirty-five year old farm woman, who shares the farm work on their grazing farm with her husband, but finds herself '99%' responsible for unpaid family work, would like to be more involved in agri-politics. However, she finds her extensive duties make this impossible.

> 'I think if you are running a stud as well as you can, most guys don't get on those boards until they have got sons who are then looking after the stud. If you are doing all you can at home you have got no time to be on boards and things. You are tired. But of course I am doing the kids as well... Maybe if I was a man and just doing what I am doing so that I didn't have to do the kids and the house I might feel quite differently. In fact, I think I probably would feel differently. But my involvement with the kids and the necessary things you have got to do in the house even if you don't want to just keep me too busy.'

Within agriculture, women are obvious by their absence from positions of authority within traditional farm organisations. In fact, only 12.5% of women report being active in agri-politics (Alston, 1993). As a result of their lack of public power, women have little influence over decisions which influence their communities and their industry.

The secondary position of rural women is ensured by ideologies which inferiorise them, by their responsibility for unpaid family work, by their lack of control of resources, by their lack of public power and by rural media which act to trivialise their interests. As a result of their invisibility, their contributions to rural communities are overlooked. Yet, women contribute enormous amounts of time and energy to their families, their enterprises and their communities. In 1991 I interviewed sixty-four farm women in southern New South Wales at length about their lives and concerns. It is evident from this research that women are making a huge economic commitment to ensuring the survival of family farming and the continuance of their communities.

THE ECONOMIC CONTRIBUTIONS OF FARM WOMEN

Unpaid Family Work

In all but one of the cases investigated, women report being almost totally responsible for household work regardless of their work off the farm, their farm work, their age, the size of their holding, the number of children or any other variable. The assignment of domestic labour to women because of their sex is a blanket occurrence in rural areas. The powerlessness of women and the structural arrangements that ensure their inferior position ensure that this will go unchallenged. Yet, for many farm women, their domestic labour includes many tasks which preserve income. Apart from the washing, ironing, cleaning and shopping, many grow vegetables, preserve food, rear young animals, make clothes for the family, and provide meals for workers (usually shearers who work on the farm for short periods each year). Many isolated women also teach their children because they are too isolated to attend school. The unchallenged assignment of domestic labour to women means that all other work they do is added to an already substantial load. Yet the results of my research suggest that many younger women are grudging in their acceptance of the traditional sexual division of labour, particularly when they are also replacing hired labour on the farm and working off the farm as well. Vicky, a farm woman in her fifties put it this way.

> 'Yes, there is only my husband and I at home, but I am totally responsible even if I have been out helping in the yards all morning and come home. I find that they sit down and watch while I get the lunch... I am used to it now, I think it is unnecessary, but I think, you know, it is an inbuilt thing in men – they just allocate you that as being your priority, and sometimes they make little concessions but mainly that's your field... they forget you are tired too, that you've been out all morning.'

Many women report similar feelings of frustration and anger. While older women tend to be more traditional in their outlook, the younger women, taking on many disparate roles, are far more likely to question the expectations of their partners.

Community Work

The nuturing role of women extends beyond the immediate sphere of the family. Women are heavily involved in keeping rural communities functioning. In fact, without their efforts many services in small Australian communities would be threatened. In my study I found that 55% of farm women were involved in more than four community organisations. These usually related to education, aged care, charitable works and sporting organisations. The efforts of women supplement or facilitate existing services. Further, their efforts in ensuring such services as Meals on Wheels helps keep older people in their homes. Within the schools, women work in the tuckshop, help in the classrooms, provide transport for excursions, clean, sew and cook for functions and attend meetings. Many women give time and effort to facilitate the sporting and leisure pursuits of men and children. Several women report they are on the executive of the local football club or are a member of the football club Ladies Auxiliary or work in the kiosk for sporting events. This facilitation of the leisure of others is not reciprocated and many women had curtailed their own leisure activities as a result of time and income constraints.

Farm Work

For farm women, their work is extended by their commitments to farming. Because of the downturn in commodity prices in agriculture many farms are doing without hired labour. The workload is being redistributed among family members. For women, this has meant they are doing more of the physical labour associated with farming. The amount of labour they perform on the farm is dependent on their legal status within the enterprise and their availability. For example, women whose husbands are involved in extended family arrangements, may not be doing much farm work at all, while those in partnership with their husbands are doing a great deal. However, their work is also dependent on their availability. The trend for women to work off the farm means they may not be readily available. Some families structure their farm work to fit in with the off-farm commitments of women. Sharon described her juggling act this way.

> 'The times I worked full-time I made sure it was never harvest time or cropping time.....and my one day at school, I suppose there were times when you would have to juggle around a little bit.....there were times I suppose that some of the [farm] jobs had to be thought about before the day or juggled around a bit.'

When women do work on the farm an interesting gendered division of tasks has developed such that women do the less significant tasks and men the more critical. Consequently, although 45% of women report that they drive machinery, many state that they plough but do not sow, they rake hay but do not bale, and few will spray or drive the header. Women are, however, very much involved in the livestock tasks. While 90% report being involved in some way, 47% state that this is a significant part of their workload.

Bookkeeping and 'go-fering' are predominantly female tasks on farms. In fact, 64% of women interivewed are responsible for the books and this is directly related to their significantly higher education in relation to their husbands. Eighty-three per cent of women in the study report that they have educational qualifications equal to or greater than their husbands. Yet, despite their higher education, their involvement in farm tasks and their efforts in other areas, only 13% of women report they have some level of involvement in the farm decision-making process.

Off-Farm Work

As well as their unpaid work in the household, in the community and on farms, rural women are moving into the paid workforce in large numbers. In fact, the movement of farm family members into the paid work force is an accelerating trend in rural areas. Because the volatility of the marketplace has seen a serious downturn in farm incomes, one of the more common strategies adopted by farm families is the taking of off-farm work to secure income. In my study, 43% of men and 50% of women were working off the farm in some capacity. Yet, women note that because of a lack of satisfying employment, they often work in insecure jobs which are mostly part-time and for which they are over qualified. Of those who were working, 77% stated that their income was spent entirely on household expenses.

Identified Problems

The economic contributions of women in rural areas can be seen from this study to be extensive. Yet, the gendered nature of rural life has acted to negate these efforts of women. This lack of acknowledgement arises from a lack of attention to anything done by women beyond the private sphere of the family. Any work outside the family is often seen as merely 'helping out' and not as independent effort. Further, as a result of their secondary status, the problems they encounter in their daily lives are often overlooked. Yet, women report that the changes in rural society are having a direct and often deleterious effect on themselves and their families.

In fact, rural society is disintegrating as many areas are becoming depopulated. Rural services are closing, employment opportunities are contracting and the standard of living is reduced. Domestic violence is increasing in rural areas and rural suicide rates, particularly among young males, are alarmingly high. Farming families, whose incomes from agriculture are precarious, suffer serious lifestyle constraints. For family members there is increasing pressure to work harder in all areas of their lives both on the farm and off. In fact, broadacre farming incomes have been negative for eight of the last sixteen years (ABARE Farm Surveys Report, 1992). In my own research, 33% of women reported that spiralling costs and decreasing returns have resulted in no money coming into the household from the farm enterprise. Many families are, in fact, relying on their off-farm work and on the Family Allowance and the Family Allowance Supplement to survive. In such conditions, women are facing serious problems maintaining an acceptable standard of living.

Employment Opportunities

As a result of the need for off-farm sources of income, one of the most urgent concerns for women is the scarcity of employment opportunities. The segmentation of the labour market is accentuated in rural areas and satisfying jobs for women are few. The increasing trend towards off-farm work by farm families has accelerated, however, the lack of employment opportunities is a factor of rural life. Many women find it difficult to find satisfying employment in the area of their specialisation. Being unable to find work in the field for which you are qualified can be devastating. Jan is a young farm woman brought up in a capital city. She has two university degrees and is highly qualified in her specialised field. She now finds herself in an isolated farming community with a small child, a very long way from any potential employers who might use her skills.

> '...for the first time in my life when I came down here I wished I had done nursing or teaching or something like that... which you could do in this area... I am totally over qualified... There is really no scope for my field here unless I could get a job at X [150 kilometres away] but that is still too far to travel every day to make it economically viable.'

The lack of opportunity for employment is a constant theme for rural women. Janet, a forty year old woman, finds this particularly difficult.

> 'Really [there's] nothing available. Not for an untrained, unskilled worker unless I was prepared to go and clean houses. I can't clean my own so why am I going to go and clean somebody else's?'

Gail, who has managed to find one and a half days work as an assistant at the local school, stated:

> 'Unless you want to pick vegetables during the vegetable picking season or something you might be able to pick up a bit of that... other than that there would be very little around here. Probably none I would say.'

Paid work in rural areas is, for many women, very fragmented. Little accommodation is made to facilitate their work. Marianne pointed out that she was forced to work four half days instead of two full days which would have saved her petrol and travelling time because there was no flexibility at her place of work. Employers take little notice of the fact that women may be travelling long distances for part-time work in rural areas and certainly no child care provisions are available.

Child care is a constant problem for rural women who wish to, or need to, work. Anna is a trained teacher with four children. She provides much of the household income with her casual teaching and, yet, the difficulties she faces in getting to work are enormous.

> '...I had an opportunity to do an eight week block of teaching straight ... but there's just no-one I could leave my child with for that length of time....The young girls they're either too young so that you can't use them or they're at school or once they get of age they leave the district.'

Women who do work off the farm often leave very young children with their husbands because of a lack of rural child care facilities. This can cause great anxiety for women who know that farms are one of the most dangerous workplaces in this country. Many expressed the concern that they felt their husbands are less vigilant than they are. Michelle sums up the feelings of many young farm women:

> 'Yes, it worries me. I don't like them to go with (my husband) when he is working with machinery because they get busy and forget about the kids and accidents can easily happen.'

Support Services

The declining population in rural areas has had a serious effect on the delivery of support services. Many services essential to a secure way of life are closing down. Small towns are losing their banks and post offices and health services are being regionalised leaving many towns without acute and emergency hospital beds. Doctors are not attracted to rural practice because of the lack of facilities and the reduced quality of life, and consequently, much of rural Australia lacks even basic health servicing. Enhanced services such as counselling, speech pathology, physiotherapy, mammography screening may be hundreds of kilometres away at the nearest regional city.

For women who are victims of domestic violence, isolation is a factor which accentuates their trauma. Lack of support services such as crisis accomodation, the availability of guns and a lack of adequate transport facilities ensure that victims of domestic violence are very vulnerable indeed (Coorey, 1989).

The lack of adequate educational facilities is another factor affecting the lives of rural dwellers. Often rural children must leave home to gain access to tertiary education. Many women note that they themselves would benefit from access to institutions to further their own education. Several stated that they would like to study agriculture but could find no courses that would accommodate their needs.

Health Problems for Rural Dwellers

The increasing pressures on women to contribute their time and energy in income preserving or income producing activities are not without cost. Women report an increase in health problems brought about by overwork. Maureen, a thirty-five year old farm woman described how she was feeling before she took a break from full-time off-farm work.

> 'When I was working off-farm ... I used to come home absolutely exhausted every day and then I would sometimes try and go up to the sheds and do a little bit up there. No, I was mentally exhausted as well as physically exhausted I think. I would come home and I would sit down and I would not probably move for sometimes half an hour!'

It is not only the women who are affected by the constant pressure to increase their workload. Many women report they are worried about their husband's health as a result of overwork. Some suggest that their husbands are withdrawing from the community and rarely leaving the farm. The crisis in agriculture is having a serious and under investigated effect on the health of rural people.

The serious financial restraint felt by many farming families can be assessed by examining the type and amount of holidays families take each year. No women in my study reported that their family takes any more than two weeks holiday per year. However, what is more alarming is that 50% stated they take no holidays at all because they cannot afford to do so(Alston, 1993). Because farm families are struggling to remain viable, they are placing their health and well-being at risk.

Chemicals in Agriculture

One of the most serious concerns reported by women is the increasing use of chemicals in agriculture. Over the last twenty years, capital intensive agricultural practices have replaced labour intensive procedures. One dramatic result has been the development of chemical controls of pests and weeds in place of the previously labour intensive control measures. Coupled with this development has been the growth of agribusiness concerns and their tightening control of agricultural inputs. Farm families find themselves victims of a 'technological imperative' or the need to continually pursue the latest innovations in order to maintain profits. Lawrence (1987:159) states that 'this technological imperative means that the farmer has climbed aboard the agribusiness treadmill becoming in the process a sort of rural 'junkie' hooked on agricultural chemicals'. All the women interviewed expressed concern for their own health and the health of family members as a result of the blanket development of chemically based agriculture. Yet the introduction of such methods is met with little opposition by family members as they strive to stay ahead of creditors. Jean, a forty-five year old farm woman described it this way:

> 'I don't like chemicals. But in today's farming they are a necessity – they absolutely are. But you know I don't like them. I don't think a lot of people do like them but they are just one of those things you have to use.'

Chemicals are used to reduce land degradation and to replace the overworking of land. However, there appears to be inadequate information available to rural dwellers about the effects of agricultural chemicals on their health. All women interviewed reported serious concerns about the health of their male family members and fears for their own health, particularly when pregnant. Meg, a sixty-four year old farm woman put it this way:

> 'When you have a son who sprays on Saturday and walks in on Sunday and says I don't feel well. Yes I am very uncomfortable.'

Carrie was another who expressed deep discomfort with the effects of chemicals on her sons.

> 'Oh it worries me a great deal particularly as the boys won't take precautions very greatly. I go to all those meetings and come home with all this information and tell them all about it and try and get them to take notice but they won't ... They are very careless and this does worry me a lot.'

Jenny was more in tune with the thoughts of the younger women who worried about the effects on their unborn children.

> 'Well it has its pluses and minuses. As far as land degradation goes, it is good because you are not over cultivating the land. But then I think everyone worries about the pesticides and herbicides you are absorbing. Obviously we absorb a lot more than people in the cities do ... I was really worried when I was pregnant.'

This concentration on chemically based agricultural production has occurred despite the private fears and concerns of most farm women and many of their husbands. It demonstrates the degree of control over agricultural production by agribusinesses and the powerlessness of farm families to escape the 'technological imperative' that is driving agricultural production.

Social Security Benefits

Rural families are also affected by the inadequacy of the social security system. Because of the assets test requirements, many farm families remain ineligible for benefits despite having little or no income. Particularly disadvantaged are rural aged ineligible for the aged pension and young people who are unable to access Austudy. Older farm women report that they and their husbands are forced to work into their old age because they retain title to their farm. In some cases, the farm had been on the market for several years and could not be sold. In other cases, son(s) and daughter(s)-in-law were now working on the farm drawing income but unable to afford to buy the farm. In many cases three generations of family, including the old couple, are reliant on the farm income, all living well below the poverty line.

Similar tests on assets prevent many young rural people securing Austudy benefits and being able to access tertiary education. Despite owning the farm, parents are unable to provide the resources needed for young people to move away from home to study. Talk of tightening the assets test on Family Allowance payments is causing a great deal of anxiety for many women in rural areas who rely heavily on this benefit.

Actions

Women in rural areas face serious problems maintaining an adequate standard of living for themselves and their families. However, chief among the constraints impacting on them are the hierarchical gender relationships which structure rural society and which act to negate their efforts and trivialise their concerns. Women's lack of visible power legitimates their secondary status. Their assigned responsibility for domestic labour, often despite their muted protests, ensures their time to pursue their own interests and issues is necessarily limited. There is much that could be done to meet the needs of rural women. Chief among these, however, is public recognition of the contribution of women to ensuring the viability of rural communities and of agriculture. In order for this to occur effectively, the way official agricultural and census data is collected needs to be changed to ensure women's contributions are adequately recorded and counted. Analysts who praise the efficiency of Australian farmers without giving due recognition to the efforts of all family members are not giving the whole picture. The persistence of family farming is enabled by the flexibility of the family structure. In particular the work of women on farms enables the continuance of family farming in its present form. If adequate retribution were made to women for their efforts the 'efficiency' of farming would be sorely tested.

To adequately address the stated concerns of rural women, a number of strategies should be adopted.

- Inequitable gender arrangements which receive so much ideological support in rural communities must be challenged. While ever women lack visible power and are expected to perform the lion's share of unpaid work in the home and in the community, they will retain their secondary status. There is a need for women to be given opportunities to achieve positions of power. In particular, local government and farmer organisations remain male dominated and do not focus on the issues facing women.
- For those who are seeking satisfying work away from the home, there is a need for governments to foster the development of employment opportunities in rural areas. Highly skilled women report their greatest anguish is the lack of opportunity to pursue work in their field of specialisation. Regional development outside metropolitan areas is an essential strategy to provide jobs for disadvantaged rural dwellers. However, there is also a need to redress the segmentation of the labour force which sees women confined to a narrow band of often low status and low paid positions. In rural areas, many jobs revolve around agricultural industries and women have not often been represented in many areas of available employment because these are seen as men's jobs. Hence there are very few female stock and station agents or bank managers. As a consequence, men with less education than women will often receive higher wages in rural areas. This segmentation needs to be challenged so that women can gain employment in traditional male occupations.
- Rural based child care services are desperately needed. Women will remain disadvantaged while ever they do not have adequate child care services. The lack of rural child care services remains one of the greatest problems for women seeking work away from home.
- Another area where swift action is needed is the area of social security entitlements. The imposition of assets based testing on pensions and other benefits indicates that the government has failed to note the effects of this policy on farm families. So many such families are living below the poverty line and are enduring enormous hardship because of this inequitous policy.
- Women's concerns about chemically based agriculture are another area where the community should take action. The cost of the commitment to the technological advancement of agriculture should be examined in human terms. Families in rural areas need to be given adequate information about the chemicals which have become so much a part of their lives. The level of disquiet among women about these practices should be acknowledged as a community concern, and the community as a whole should be part of the debate on the future direction of agriculture.
- There is a need for isolated rural dwellers to have greater access to further education. The exploration of technologies to enhance such access should be a priority for the Australian community. The needs of disadvantaged young people should be an integral part of this exploration. As well, the expressed desire for agricultural courses by women on farms should also be noted by education providers in this country.
- There is a further need to examine the effects of retracting services in rural areas to assess the impact on the community members. There is a real danger in relying on the unpaid efforts of women to fill the gaps in service provision, because these are women who are already filling in the gaps in a number of other areas. For some they are 'filling in' on farms, working in the community, performing paid work, and taking major responsibility for domestic labour. To expect that women will pick up where services left off is not realistic.

- Reports of increasing domestic violence and suicides in rural areas are a grim indicator of conditions in the bush. Adequate services for isolated families to deal with such emergencies are urgently needed. The retraction of Health services to rural areas on economic grounds may be exacerbating the problems.

Rural women are making a major contribution to the continuance of a reasonable quality of life in their communities. Yet, their efforts are often trivialised because of the ideological assessment of their place in society. The secondary status of women and their resultant powerlessness has led to a lack of understanding of the breadth of their contributions and to a discounting of the issues which impact on their lives. This paper has addressed some of these issues which were voiced by farm women in southern New South Wales and has outlined possibilities for community action to help overcome some of the problems for women in rural areas.

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QUEENSLAND RURAL WOMEN — TAPPING AN UNDER-UTILISED RESOURCE

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ABSTRACT

This paper will discuss the recently formed Queensland Rural Women's Network (QRWN) and argue that it is a crucial organisation that aims to improve the contribution of rural women to Queensland's economic and social development. QRWN is a unique organisation for the women of Queensland. Its primary aim is to develop skills so women can exercise their own power to make changes to their lives and communities. It will be shown that the changed political climate in Queensland has both initiated and fostered the development of the network. QRWN proposes that the government and rural communities should support, and utilise QRWN's register to help improve both the condition of rural women's lives and the contribution women make to their communities.

INTRODUCTION

The network aims to help all Queensland women living in rural circumstances, whether on the land or in the towns, contribute more effectively to the sustained economic, social and ecological fabric of Queensland.

The following aims have been enunciated:

- To network with other groups by liaising at local, community, regional, state, national and international levels to improve country city relations and support the sharing of experiences by rural people.
- To assist access to services for all in rural communities by promoting the network and the provision of information by government and private organisations.
- To raise the profile of primary industries by promoting their value and diversity.
- To raise the self esteem of rural communities through the encouragement of personal development and education.
- To assist the sustainability of the family unit by providing information on aspects of the law, family farming and relationships in the context of rural life.
- To provide safe environments where such things as personal concerns, business, government and media can be discussed.

BACKGROUND

QRWN was conceived in the minds of many Queensland rural women before it was born. Unspecific "need" was the driving force. The grassroots move for rural change began in Monto at a Women in Agriculture meeting, called by Jan Darlington, on 6 April 1993, to see if there was any interest in setting up a state network. A steering committee was formed, and at a later meeting held in Mundubbera, the group was officially named Queensland Rural Women.

Those on the steering committee of QRWN to a large degree had experience or knowledge of networks in other states. Steering committee members are all achievers in their own communities, seeking skills or knowledge when needed. They are practical women who get the job done. Since their first meeting in Mundubbera the group has become incorporated and has had its actions endorsed at the first "Queensland Rural Women's Gathering" held later in October. The participants of the Queensland Rural Women's meeting held after the conference whole-heartedly embraced the concept of "networking" and the group officially became the "Queensland Rural Women's Network Inc".

Participants at the conference included women from many parts of Queensland as well as government representatives including the Deputy Premier, Tom Burns MLA and the Minister for Primary Industries, Mr Ed Casey MLA. Also present were represent-atives from the Women's Policy Unit, the Office of Rural Communities, Queensland Health, and the Department of Primary Industries. The meeting also attracted health professionals, representatives of various industry, community and educational organisations.

The formation of the network echoes developments already occurring in other states, such as Victoria and New South Wales, and in other countries, such as Canada and New Zealand. Since the mid 1980's there has been an increased recognition that rural women have not received enough assistance, training and recognition for their contribution to economic development. The formation of networks and the promotion of workshops, seminars and conferences in most Australian states has been to redress these omissions.

THE QUEENSLAND RURAL WOMEN'S NETWORK APPROACH

The creation of a network in Queensland is timely, rural women are looking for recognition and information collected from the Office of Rural Communities and other government bodies endorses this need.

Researcher Margaret Alston (Bulletin, 1993, Jan 26/Feb 3 p 96), of New South Wales's Centre for Rural Research argues that many women aged under forty are resentful of the traditional roles for women on the land. She further argues that the needs of rural women who do not fit the norm of traditional women's groups are not being met. QRWN Chairman Jan Darlington echoes strongly the concept of "unmet needs" with her own growing awareness of others making decisions affecting her life with little or no opportunity to input herself.

The scant input to decisions that impact on the lives of rural women are highlighted in Mitchell (1994, p 127), where she argues that women are unrepresented in decision making at all levels, local, state, federal government, senior positions in all commercial enterprises in law making and law enforcing institutions. She quotes the (First Triennial Review of the Home and Community Care Program 1988)

> Where women are recognised as more likely to hold lower paying jobs and provide for domestic stability. In this society women have special (different), needs that are under resourced ie the dollars spent on women in any field of endeavour (sport, health, education, agriculture), are much less than men.

The recognition of the unmet needs for women is the impetus for the birth of this network in Queensland. Rural women often work the triple shift, on the farm, off the farm, and in the community. This triple shift leaves little time for personal pursuits, education or training. Networking is useful because it does not require much time or place commitment, but can meet these needs for information, support and social interaction.

THE CONTEXT

According to the 1990 Census, there are 555,017 women residing outside Brisbane and Moreton. This represents 37.1 per cent of the total Queensland female population. Furthermore Queensland has the largest population of Aborigines and Torres Strait Islanders, half of which are women. These women represent 26 per cent of all Aboriginal and Torres Strait Islander women and 2.5 per cent of all Queensland women. There are also approximately 25,000 migrant women in rural Queensland, and close to 200,000 disabled women living in Queensland. These figures show the importance of not only recognising rural women, but also acknowledging their diverse needs.

The geographic distances within Queensland puts huge pressures on government service delivery to the state's residents. Half the population of Queensland resides outside the metropolitan area. To quote the Courier Mail, (March 12 1994), "fresh population projections, released by the Department of Housing, Local Government and Planning this week show most areas of the east coast are in people boom mode." It is predicted that Queensland's population is set to double within forty years. However, this growth will be centred mostly on the coast, to the detriment of inland areas. While services will be stretched to the limit in high growth areas, decline will occur in smaller rural communities unless intervention occurs, thus making arguments in rural areas for the maintenance of present or increased levels of government funding difficult to sustain.

The economic conditions of much of rural Queensland have been either static or negative for a number of years. Economic stress caused through drought, low commodity prices, population drift and a variety of compounding factors are all contributing to the near demise of many rural communities. Thus, making compounding levels of stress for residents in rural communities trying to hold their lives and livelihoods together.

Some positive developments in Queensland rural communities have began. The Queensland Government Agencies Program (QGAP) for "One Stop Shops" are slowly being put in place to reconstitute an agency and information service for rural communities. To quote Inglewood Alderman Trevor Gray "People in the bush are getting restless. They are sick of being forgotten." Courier Mail (March 26 1994) Nevertheless these services are under staffed and under resourced and not addressing many of the needs of rural communities, a thought expressed by network members.

The recent political climate in Queensland has provided a catalyst for the formation of a rural women's network to deal with issues arising from changing government priorities.

After many years of conservative Liberal and National Party rule, Labor came to power in 1989. Before the change of government, the winds of rural economic downturn were already evident. Yet Labor polices initially failed to take account of the continuum of certain institutions intrinsic to rural culture. John Tosh states that strategies for change which fail to take the measure of institutions integral to our culture over many centuries are likely to founder, through underestimating the obstacles to change they will end as futile political gestures (1991, p. 20).

The loss of services to rural communities has shocked whole communities and galvanised them to action. So, outraged were the communities that the Labor Government are looking seriously at a rural policy to manage government decisions affecting rural communities. The formation of the Office of Rural Communities, under the Deputy Premier Tom Burns MLA, is a recent example of the Government's recognition of the importance of rural communities. This office recognises the difference of rural communities, and have also put in place policy offices to respond to these differences. The development of a policy to "Guide and Evaluate Future Government Decisions Affecting Rural Communities" is important to help build a sense of certainty for rural people in an uncertain economic climate. This policy seeks to put a framework in place that recognises that government-initiated change in rural communities, if unmanaged, can have a dramatic negative multiplier effects.

Women have an important place to play in these new developments. The creation of the Women's Policy Unit, Women's Infolink and the Office of Rural Communities specifically target rural women, finally acknowledging our importance. Specific strategies are being developed to redress the paucity of information and services for rural women. These strategies for women are important, but must not be seen as watertight gains. QRWN recognises that changing political fortunes could once again delegate women and their productivity in rural communities to little more than "the farmers wife."

There is a distinct rural culture both at one, and at times at odds with Aboriginal, small-town and regional value systems which needs to be considered when decisions are made, or policies developed which impact on rural areas. The development of rural sociology studies is showing distinct differences in rural attitudes concerning women, Aboriginal and community value systems compared with changing egalitarian views in the wider community. Women may live and work in their rural communities, but unless they have the knowledge to recognise the limitations imposed by the cultural context in which they live, solutions cannot be sought. The formation of this women's network as a two-way information conductor is important in assisting rural women to know and portray themselves with greater realism.

A RURAL AND REGIONAL WOMEN'S NETWORK

The need for a rural women's network in Queensland was reported to the Office of Rural Communities in 1993. This report detailed activities with rural women's networks of other states highlighting how little Queensland had done in this area. Victoria by example has had a strong Rural Women's Network since 1986. Many Queensland rural women wanted similar services and support to enable them to develop skills and initiatives for change and growth.

Nevertheless one concern raised in the report was the perceived threat of the network becoming a "feminist front". This viewpoint argues that women do not merit special consideration, and that a network should only focus on rural families. The report also discussed whether or not to include the term regional in the name.

The QRWN relationship with other groups at a state, federal and international level is important. QRWN does not want to duplicate the work that many industry and special interest groups are already doing, instead it seeks to provide a link for Queensland women whose needs are otherwise not being met. QRWN is different from the Country Women's Association (CWA). QRWN seeks to promote women's information, skills and courses designed specifically to generate economic development.

The QRWN also seeks to attract and represent younger women. Elizabeth Teather, in a study of the NSW CWA argues that the aging membership of the CWA makes it less attractive to younger women.

> "In this context it is interesting to note the contemporary success of the Nursing Mothers Association... younger women who would originally have considered joining the CWA, appreciate the commitment to women as professionals of

> Quota, Zonta, the business and professional women's clubs and even those Rotary Clubs opened to women (Teather, 1994, p. 121).

The QRWN's Chairman Jan Darlington believes women need a different support system.

> "They are more involved with the economics of farm living, the modern technology that farming needs and with business principles. The CWA possibly feels threatened and I wish they didn't. We are calling QRWN a register and I can see both of us working very well together" (Bulletin, March 1994, p.47).

What QRWN has done is find a market niche for itself as an interface organisation by developing a unique Queensland network. Women worldwide are forcing a change to agrarian polices by just proclaiming their presence. In July 1994 Australia hosted the first International Women in Agriculture Conference in Melbourne. This conference represents a significant step forward not only for Australian rural women, but for all women. The QRWN has had significant input into the planning and strategies that aim to make this conference a powerful voice for the issues that rural women.

From the first meeting held at Monto to the ideas of "Queensland Rural Women's Day" and the annual "Gathering" for all Queensland rural women, there is a practical basis. Both "Rural Women's Day" and the "Gathering" are media focus events with the objective of raising the worth and profile of rural women. Both events have proved successful and will continue. A "Queensland Rural Women's Day" will be held in July 1994 and the Second Rural Women's Gathering is to be held in Mackay in October. The QRWN's involvement in the Australian Broadcasting Corporation's (ABC), first "Queensland Rural Women of the Year Award" both as an initiator and sponsor is an important milestone. Recently Charleville wool producer, Barbara Marks was named winner, with Childers avocado grower Donna Duncan, runner-up. Both Marks and Duncan will be at the Melbourne International Women in Agriculture Conference in July, where the National Rural Women of the Year will be announced.

These events have generated a lot of media attention because Queensland was the first in Australia to have this award. The finalists are leaders in their respective industries and they are the visible farmers (a play on "The Invisible Farmer", Williams, 1992).

Yet another initiative has been QRWN's involvement in the Telecom research project. This project is examining how rural women use communications technologies to access information and referral services and to network. While the QRW of the Year awards are public, the Telecom research project encompasses both the private and business world of rural women. This interface role for QRWN is important because no one accesses rural communities without an invitation. The difficulties for rural service providers is summed up by the unpleasant metaphor "blowflies", the term often used to describe these workers. This lack of suitable communication leads some remote communities to miss out on services, even though most government policies now include a rural outlook. The QRWN works on community development principles in helping people to help themselves.

The interface role of QRWN has also been demonstrated by the joint Queensland Rural Health Policy Unit, Women's Health Policy Unit and QRWN trial of the World Health Organisation (WHO) Rapid Appraisal Needs Assessment Model. Researchers Jan Jones and Susan Stratigos visited three centres to show rural women how to effect change in their communities and a paper on the results of this project will be presented at this conference. Rural people are more than capable of doing things for themselves, but what is sometimes needed is expert guidance. Other groups such as Youth Affairs Network of Queensland (YANQ) and Commonwealth Rehabilitation Service (CRS) are looking at ways in which the QRWN can input, to make rural people's lives better. Networking with other groups is an important aspect of the QRWN. Rural women need to speak to each other, so that they can reference their lives against others, learn, and ultimately help themselves and their communities reach equitable goals.

FUTURE STRATEGIES

Researcher Margaret Grace (1994) has helped the QRWN identify six systems which need to be developed within the context of action research principles to ensure the ongoing growth and strength of the network. The QRWN members are the subject of the research, and the participants in any action recommended from the analysis and reflection of questions as they arise. The systems are: QRWN steering committee, contact/resource person network, regional network, QRWN "Gathering" interstate/international networks, interface with government and organisations.

The premise under which QRWN works is that information is power but, information is useless without the energy of people to develop a project. To date the QRWN project has been powerful because of the energy and enthusiasm of all who have worked with the network. In the short-term the QRWN's success has been spectacular. The medium-term aim is to consolidate the QRWN's work and the longer-term is yet to be determined.

In summary the strategies of the QRWN are being developed as questions and challenges arise. The challenges of the modern world are many, and rural communities must meet these challenges in order to survive. The contributions of rural women to economic growth and community development has been recognised world-wide. Our network seeks to help rural women realise their own power as agents of change by encouraging them to take an active part at both a domestic and professional level, so that our rural communities survive into the twenty first century.

N.B. The title of this paper "Queensland Rural Women - Tapping an Under-Utilised Resource" is conceptualised from the title of Brough's paper "Rural Women - A Potentially Untapped Resource in Queensland". The tapping of this resource is becoming well documented through Integrated Pest Management Programs, Landcare, and the QRWN's involvement in regional and remote rural communities.

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WORKING TOWARDS COMMUNITY DEVELOPMENT IN A SMALL RURAL AND REMOTE CENTRE IN NORTH WESTERN QUEENSLAND FROM A COMMUNITY DEVELOPMENT OFFICER'S PERSPECTIVE

Roz Kiernan – Australia

ABSTRACT

The Commonwealth of Australia's Department of Human Services and Health established one of three North Australia Social Justice Strategy Pilot Projects in Richmond, a small rural and remote service centre in North West Queensland in 1992. Richmond is located approximately 500 km each way from Mt Isa and Townsville. The community has been in economic and social decline since the downturn in primary commodity prices and successive droughts in the early 1960's. It has the second highest cost of living in the State of Queensland and approximately 29% of its annual household income is less than $20,000. There has been a slow and continual withdrawal of Government services or rationalisation of services.

The Government funded the Pilot Project under the Locational Disadvantage Research Program. After extensive survey and needs analysis the position of Community Development Officer was created as the "Project". The Community Development Officer's role was to facilitate social development and implement programs developed by community within guidelines set by Government Departments over a twelve month period. The timeframe was extended to two years.

The paper includes issues and outcomes from the perspective of the Community Development Officer. The paper will briefly examine –

1. Why the project came into being.
2. Why Richmond was chosen.
3. What programs were introduced to service the community and why.
4. What were the outcomes.
5. Why did the observed outcomes occur.
6. Is there anything scholars, researchers, social planners and policy makers can learn from the Richmond experience about the provision of services to small rural and remote communities and there associated development?

The paper will provide an insight into community development from the community level through the eyes, ears and actions of the field officer who has lived over forty years in small rural remote western Queensland communities.

The Commonwealth Department of Human Services and Health's mission is to "enable all Australians to lead independent and healthy lives through our national leadership in the coherent and responsive development of human services". The Department administers nine major programs of health advancement, health care access, family and children's services, aged care, disability services, housing and urban development, local government, national capital planning and corporate direction and support.

The Department of Human Services and Health (the renamed Commonwealth Department of Community Services and Health) established the Rural and Remote Areas Unit in November 1990 to examine how services for people in rural and remote areas could be made more flexible and responsive to the needs of individual communities. In response, in 1992 funding was granted by the Department of Prime Minister and Cabinet to finance three Cross Program Demonstration Projects under the Locational Disadvantage Research Program. The Projects were funded in the second year by the Department of Human Services and Health's North Australia Social Justice Strategy. Richmond, a small rural and remote community in North Western Queensland was selected as the location for one of the Social Justice Pilot Projects.

Research had already been conducted by the Department, the Institute of Family Studies and the North Australia Development Unit into the needs of Richmond and the community had been approached to take part in the Pilot Project. The Richmond Shire Council and key community leaders made a commitment to the Project in early 1992 and it became known as the Richmond Social Justice Pilot Project.

The Richmond Project's aims were to (1) promote improved access to services, (2) develop appropriate planning and co–ordination processes, (3) improve responsiveness of services to meet community needs and, (4) develop simplified effective accounting measures. The development of services and day to day support for the community groups and management of programs would be co–ordinate by a Community Development Officer with assistance from a Townsville based Departmental Officer. The cost of implementation of the Richmond Project was a joint venture between the Department of Human Services and Health the Richmond Shire Council. Initially the timeframe was for twelve months but was later extended for two years.

Richmond is located around 21 degrees South and 143 degrees East, 550 km WSW of Townsville and 450 km E of Mount Isa on the Flinders Highway, one of the main arterial highways across inland Queensland. Population of the township ranges from 650 to 700 people with a total Shire population of around 1200. According to AB data the Aboriginal component was 6% of the population in 1991. However, during 1993, with the closing of the railway sidings along the Inlander Line the Transport Department relocated many of the single men's positions to Richmond. This increased the Aboriginal and Islander proportion of the population to approximately 10%. The Shire is not a particularly large one in area. It covers only 26,436 square kilometres.

In May 1992, I arrived in Richmond to take up the position of Community Development Officer. Willingness to meet the challenges of living in isolation where the need to be self–sufficient combined with the ability to respond to issues intuitively, creatively, with vision, care and consideration for others and the environment are some of the strengths a Community Development Officer requires to achieve positive outcomes when working in rural and remote areas of Australia. These along with the desire to ensure the survival, consolidation and development of rural and remote communities are part of the fabric of Rob Kiernan. For nearly two years the delivery of social justice in Richmond was the focus of my commitment, even though I have never wandered far from the concept of combining social, cultural, economic and environmental development to meet the needs of the people living in far flung rural regions.

In Richmond, I found a community which had no clear direction and very little concept of what a Community Development Officer could do for them. Some expected me to become a baby sitter for the youth and immediately dumped the responsibility solely on my shoulders subtly refusing to work in a voluntary capacity on any programs but demanding the right to direct my work. As the community development work load increased, I depended on my husband to become the sole volunteer youth centre worker. Then there was the Committee member who was determined I would re–establish the local newsletter and become the journalist, printer and publisher. All this because, as I later determined, he had been part of a group which was funded to publish the newsletter and no–one wanted to do so. I can well appreciate the reluctance of key people to participate. They were burnt out from years of community services and although they had good ideas had little energy left to carry them out. This was highlighted by the withdrawal of departmental services and loss of motivated and skilled itinerants.

Fortunately, I was shortly able to facilitate change in the structure of employment and a Youth Centre Co–ordinator position was funded on a part time basis until the position of a Youth Development Officer was created.

In hindsight, the Department when funding the Project, had made the appropriate decision in providing a Community Development Officer position rather than trying to impose on the community, what the Department perceived as immediate solutions to what turned out to be very complex issues.

As a Community Development Officer coming into the community, apart from "burn out" issue I had to deal with mistrust from some quarters, hidden agendas, power plays, indecision, buck-passing and a lack of commitment to, or knowledge of, social justice issues by the power brokers of the community. Basically it took at least the first twelve months for me to gain personal acceptance and the project needed longer than a further twelve months to mobilise a community which for various reasons is still somewhat inert.

Valid ways of acquiring acceptance and trust in a community may seem surprising to some, but are very real in small communities such as Richmond. So despite feeling under pressure to achieve something big I had to take a step back from the agenda and deal with what could be termed the little problems presented to me, and prove my worth by immersing myself in the day to day functions of the community. This included my helping out at the local school, in goose club raffles (of more importance than you might think) and generally making myself visible and accessible on the street.

It should be made clear at this point that the Richmond Community did not perceive the Community Development Officer position as part or all of a project. The Project at that time was simply the provision of me as a resource to the community to assist them in clarifying their future direction and developing responses. Therefore, the burden of the success of the Project was born on a personal level.

Looking back, a major breakthrough in my credibility occurred with the success of a submission to repeal the local tennis courts. As I mentioned earlier, one of the initial complexities of the Richmond Project was the lack of credibility afforded to me until some tangible evidence of my value could be shown to the community. The sealing of the tennis courts provided this evidence. While this may not have been the top priority in the community's mind, it was one of the few problems that could be effectively and efficiently addressed with the result that the public had something concrete as evidence of the usefulness of a Community Development Officer to the town.

Besides being tangible the response to need was precise. It did not threaten the accepted community mind set, and it was small enough to be done without becoming bogged down in months or years of protracted and difficult negotiations between Government Departments that later initiatives had to deal with.

Having achieved a certain level of acceptance and success it was important to keep the momentum going. The next step and this task wasn't made any easier by the inadequate response of the government agencies to the needs identified in the community. One of the community's top priorities had long been the need for housing. Yet it has took from September 1992 to April 1994 from submission preparation to tender approval stage to be achieved. It took 18 months be able to show the community that Government was really fair dinkum when it articulated its wishes to provide affordable and appropriate housing to low income disadvantaged groups. For nigh on twelve months from the time the Deputy Prime Minister assured the Shire Chairman, Shire Clerk and myself at a meeting in Cloncurry, that Richmond would receive funding under the Local Government and Community Housing Program, the State Department of Housing Local Government and Planning dallied with the funds, delaying commencement approval. This point needs to be taken note of for future projects of this type, particularly given the Department of Human Service and Health's vision as a lead agency in the provision of human services. Given the political realities of jointly funded programs, what ability does the Commonwealth have to respond to need unless State Departments can be dragged along with the vision. There are unnecessary delays occurring that have a detrimental impact on community trust of Government programs. How would any of you like to be one of those people out there waiting for accommodation promised in early 1993? Is there any wonder their disillusionment is accentuated when not only can they not get meaningful employment because they don't have the necessary skills but they can't acquire suitable housing, and they don't have the social skills to cope in another community?

The following is another excellent example of need for agencies to respond appropriately and speedily to identified problems which, with a little display of inventiveness and willingness, solutions could be implemented with no long term extra cost to the tax payer. Richmond has been arguing for improvement in aged and health care for over twenty years, clearly stating what the residents basic needs are and working towards achieving objectives. The agency solutions have been based on southern urban concepts hardly relevant or practical in a rural community with a small population.

Lack of inter-departmental/governmental co-operation is evidenced yet again in the limited manner in which the Richmond Project was able to respond to aged care needs in Richmond. Yes, we had been able to access funding for Home and Community Care, Community Aged Care Packages and housing. But a more co-ordinate approach to care provision needs to be taken and the call for Nursing Home care remains to be addressed. Because of cost effectiveness criteria, equity has to be constantly argued for in small communities.

Perhaps a solution is at hand. Application of the concept of the Multipurpose Service similar to the one being established in Clermont, Central Queensland, would go a long way to providing appropriate answers. However, this concept has been met with indifference by the Queensland Northern Regional Health Authority which administers the region in which Richmond is located. It appears that this organisation considers aged care to be a Commonwealth responsibility. It is unfortunate because the Multipurpose Service is the type of cross- program funding arrangement which operated informally in the days when local communities had influence through their Hospital Boards and one which communities understand. It is the type which would be welcomed by all except, perhaps, those service deliverers who have a new found power base in hospital regionalisation and are unwilling to share administration across a number of agencies for the benefit of the community. A nursing sister summed up the attitude by saying that the care of the aged in their dying months was an impediment to acute hospital care. Now, I ask you, why is it that the failing health of an aged person is somehow not acute. Is health care of the aged just a nuisance? Is not the life of your mother or father, or yourself as important as the next person, no matter the age? Why is there not a commitment to comprehensive health care by all agencies? What better place than the small community to implement practical mechanisms for the delivery of health care from the cradle to the grave, where hospital facilities are frequently under utilised, where funding is split to expose false shortages of resources, where if the resources were pooled delivery of a comprehensive and co-ordinate service would bring immeasurable satisfaction to community members and be viable in the long term without taxing the community with yet more administration? The present solution of allocation of Aged Care Packages to Richmond is seen as giving with one hand and taking with the other. While Care Packages have been given, long stay hospital beds have been removed.

The next point I make is on regionalisation, which is currently accepted as a worthwhile policy. Regionalisation has led to some grandstanding. The fear held in many communities that regionalisation may create a forth power base at the local community expense would appear to have been realised. Health is a good example. Local communities are confused, concerned and angry that they no longer have any real input into policy development and planning of health care delivery yet are expected to take on the burden of extra administration and management of aged care. Consultation takes place during the incubation phase of program development then the decision makers return to the security of their urban offices and formulate programs frequently based on their own baggage of values to suit their own agendas and expect the unfortunate communities to wear them.

To assure you that I am not anti-government I am pleased to report that the Commonwealth Department of Human Services and Health, Queensland Department of Tourism Sport and Racing and Department of Education, Employment and Vocational Training are but some of the agencies which have attempted to quickly develop programs in response to identified needs in Richmond to cover the expanding canyons. And I am pleased to note that after two years there are other agencies now making positive moves towards developing approaches which direct appropriate programs to Richmond though the demarcation line BETWEEN agencies is still like the Great Rift Valley of Africa. The work involved unending discussions with Departments, politicians, organisations and individuals on a local, regional, State and Commonwealth basis supported by concerned people raising the same issues in similar communities.

There was an adverse impact on the Richmond Pilot outcome when the Commonwealth Government failed to allocate a contribution for the construction of the Multipurpose Sports and Recreation Centre. It had been recommended for funding by the Queensland Department of Tourism Sport and Racing as being a priority in the North West Region, and a joint submission had been made to the Commonwealth Department of Arts, Sport, Environment, Tourism and Territories. However, there was no consultation taken by the latter Department with the community, and despite consultation having taken place with its State Counterpart, no contact between the two occurred until we were informed by the State Department of Tourism Sport and Racing that the application was unsuccessful due to the fact that the Commonwealth would not fund their share of the project. The project lapsed. In a town in which positive behavioural development is found to be most successful when integrated into sports activities the decision was a blow. Sport is one of the key factors of life style in Richmond and it is a shame not to have been able to provide the proposed centre for a base through which to introduce more of the Pilot Objectives. Fortunately, there are the newly sealed tennis courts and the valued services of the highly skilled Youth Development Officer as a result of the Project. The latter position is funded jointly by Human Services and Health and the Richmond Shire Council. The Richmond Shire Council has applied to the Department of Tourism Sport and Racing for funding under a joint venture to ensure the services of the Youth Development Officer is maintained until the Shire can afford to fully fund it on a permanent basis. This indicates the recognition the Shire Council has towards the use of sporting activities to build positive behavioural patterns and at the same time develop skills.

Despite the difficulties in achieving outcomes, there were achievements in accessing Government funding to develop projects to meet the needs of the Richmond community. Two housing projects were approved, the tennis courts were sealed, the Community Aged Care Packages were allocated, the Commonwealth Rehabilitation Service conducted back care programs and acted a referral body for a number of people with disabilities as well as obtaining work for several clients, funding was granted to prepare a conservation plan for the Strand Theatre, a Youth Development Officer was employed, a Future Search Workshop was held with a part time worker employed for nine months, A Marine Fossil Museum Committee was form to develop a museum, an Aboriginal Resource Centre was constructed, After School and Vacation Care Programs were introduced, Flinders, Richmond and McKinlay Shires were granted funding to employ an Economic Development Officer, the three Shires undertook the development of a joint planning scheme, a page of news items was arranged to be included in a weekly regional newspaper, a housing conference, Aboriginal and Torrid Strait Islander Seminar\ Workshop for the International Year of the Indigenous along with numerous informal departmental meetings were conducted and I set up a mechanism for linking a wide range of departments with each other and the community. The combination of the Department of Human Services and Health and Richmond Shire Council funds and resources to place a Community Development Officer and Youth Development Officer in Richmond provided an effective and efficient means to use resources in bringing a range of programs to Richmond, linking the community and Council to a large number of agencies, providing services previously not available to the community, assisting in infrastructure development and using activities with which the community is comfortable to foster a change in attitude and approach. However, this leads us to possibly the most difficult and important part of the community development process, that of passing the control, management and direction of the projects back to the community. I have to point out that it may not have been a problem, if the Project had sufficient time to mature and incorporate a greater amount of Community involvement during the different phases of each development. This was not possible due to the limited resources and the two year timeframe placed on my position.

Communities obviously need the resource offered by designated Community Development Officer positions. There is little doubt that Richmond would not have accessed the funds it had in the two years without this position. It required the continuation of the position to consolidate the work of the past, and to capitalise on the success in recruiting community members and training them to take over current programs and develop future responses. In a sense the community needed a role model, to provide motivation and prove that with energy and determination results could happen.

How then do we develop a legitimate mechanism to resource communities with people such as Community Development Officers who can be the field link between Government, Council and community. As it stands, without the physical assistance of field workers, it is highly unlikely that struggling communities will be in the position to take advantage of services being offered or to bring about their own change in attitude or assist agencies in formulating more appropriate programs to meet the needs of these communities.

Also, how do we devise a practical timeframe, which can ignore the "budget to budget" nature of so many projects, facilitate change and ensure all participating groups are actively committed to effective delivery of improved services? These are real issues that have to be thoughtfully considered if the process of delivering social justice to rural and remote communities is to be continued.

In the North West Region of Queensland, Richmond, itself is in the infancy of revitalised community development and has become a role model for neighbouring communities, who at times look with envy asking how different things have been achieved.

I am bold enough to venture that the change in attitude now emerging in the Richmond community towards its development is based mostly on the tenacity and the dedication of the Townsville Division of the Department of Human Services and Health, the Richmond Shire Council and myself to continually promote and support community initiatives and re–state to the community that it must seek ways to overcome the obstacles and also improve its own approach. The Richmond Shire Council is the community leader, which although grossly under resource is endeavouring to build on the benefits the Social Justice Pilot brought. There are also a few community members who, though burnt out from carrying an increasing burden of responsibility, support where their energy and time allows. Yes, we had to remain vigilantly pro–active, positive, disciplined and on the lookout for opportunities and always actively committed. How else except by example, could we expect a disadvantaged community to pick itself up and work towards achieving quality community sustainability.

Thus, the commitment and flexibility issues involve external and internal facilitating factors and barriers to community development. From my perspective, it meant that the position of Community Development Officer required the ability to remain constant and have the determination to stay with a concept and keep returning it to the power brokers until they each took it over as their own idea and came back willing to develop it into an achievable co–ordinate project. I can tell you, it is no mean feat when one is dealing with a sceptical community, tired and over worked Shire Council, regional agencies engaged in flexing their muscles over competing interests and State and Federal Governments sounding similar fog horns but somehow still colliding.

I have no better way to conclude than to say that during my term as Community Development Officer I followed the rule established by Sarah Henderson when she wrote in her book *From Strength to Strength*, "Evaluate what you are fighting for and never take no for an answer". Thank you for providing me with an opportunity to describe the issues surrounding the Richmond Pilot Project. I hope that from what I have told you, the information will be of assistance in developing models which can be adapted and applied with the aim to providing social justice and equity in rural and remote communities.

THE LEARNING COMMUNITY SURVIVAL AND SUSTAINABILITY ON THE PLAINS

Joseph Luther — USA

ABSTRACT

The rural communities of the American Great Plains are experiencing fundamental changes in their economy and their society. Such changes threaten the very existence of these small towns. While local projects offer hope for survival, many of these communities lack the knowledge needed to envision and evaluate their possible futures. As a consequence, communities may pursue survival strategies that offer only short-term solutions but condemn their town's long-term sustainability, as well as that of neighboring communities. This paper details an anticipatory and participatory planning process for a "learning community." This process features a normative reeducative methodology to achieve a shared vision of a preferable future. Community design alternatives are created utilizing organizational development techniques that focus on small group learning activities. These alternatives are evaluated on the basis of sustainability checklists. Multicommunity collaboration is explored and encouraged. In this approach, paradigms may be shifted, values changed, and behavior modified as the community learns the implications of long-term sustainability versus the perils of short-term survival.

On the Great Plains of North America, rural small towns are facing desperate choices. Most of these communities are less than 150 years old and originated in the agricultural settlement movement of the mid to late 1800's. As agricultural farm-to-market centers, the communities have reached the apparent end of their life-cycle. The traditional economic activities in these small rural towns have been disappearing as a consequence of changes in agricultural practices and markets (Ekstrom & Leistritz, 1988; U.S. Department of Agriculture, 1989).

These rural small towns, facing such peril, believe they must adapt or perish. Communities across the Great Plains are in search of solutions to their plight. Such solutions often are at variance with the traditional agrarian paradigm of the plains (Swanson, 1990). Non-farm economic enterprises are becoming essential to the local community's future (Economic Policy Council, 1990).

THE WORTH OF A PLACE

These communities are seeking survival. Long after the land economic rationale for their existence has disappeared, these communities seek to survive and persist for cultural reasons. This is a different way of looking at the worth of a place. Certainly the Lakota Sioux have a different way of perceiving their Great Plains. They have a strong mythology that deals with a more spiritual landscape than a physical landscape. The spiritual landscape that is found within the heart of the learning community determines how they perceive and value their place, their town. We can't say a community will die simply because it no longer has an economic value (Duncan, 1993).

Cultural survival may mean the development of alternative economic bases within the small town. Survival, in this case, may mean the importation of a radically new economic activity that holds the promise of employment and the needed tax revenues, but at what price?

Offered the prospect of jobs in areas of high unemployment, and tax revenues in the face of obsolete and crumbling infrastructure and inadequate services, these community leaders are motivated by the short-term benefits. Community leaders have few tools with which to examine the true costs of new development and concurrent change in their town and region. Apparently, the long-term costs are not so easily envisioned and may be discounted by the present generation.

THE CONCEPT OF SUSTAINABILITY

The future of the small town on the Great Plains is bound up in the concept of sustainable development. Sustainable development is a new concept of economic growth: a process of change in which all policies are economically, socially, and environmentally sustainable. The concept of sustainability requires more equitable distribution and equal opportunities. Environmental concerns must become an integral part of decision-making at all levels (Panos Institute, 1987). The primary goal of any economic or environmental policy should be sustainable development. Environmental design must take its place alongside cost, safety, and health as a guiding criterion for development (National Commission on the Environment, 1993).

In its barest essence, a sustainable community is "one that satisfies its needs without jeopardizing the prospects of future generations ... Inherent in this definition is the responsibility of each generation to ensure the next one inherits an undiminished natural and economic endowment ... This concept of intergenerational equity, profoundly moral in character, is violated in numerous ways by our current society" (Brown, Flavin & Postel, 1990, p. 173-174).

Sustainability is a critical choice if a community seeks to survive and persist beyond the current generation. The dilemma forms before the leaders of the rural small town. Do they have an obligation to the next generation? Is there a sense of intergenerational equity?

Even more obscure is impact of choice on one's neighboring communities. Although the concept of multicommunity collaboration is only now beginning to flower on the plains, the reality is still one of "dog-eat-dog" competition for whatever scraps of economic development may be available in the short-term. The success of one community venture is often at the expense of the other communities. There is little legislative or cultural compulsion to cause a community to examine the long-term, regional effect of development.

However, multicommunity collaboration is seen as one of the few viable means of survival and persistence of rural small towns. Only through multicommunity collaboration can essential services be continued to regions of economic transformation and declining population. "By several communities working together, leadership skills, tax revenues, political influence, and other factors may be pooled to undertake relatively larger initiatives, both economic and social in nature. Also, development may become more sustainable" (Baker, 1993, p. 12).

VISIONS OF THE FUTURE

The learning community process seeks consensus based upon a single shared vision of the community's preferred future. Such consensus and shared vision require changes in paradigms, shifts in reality, and changes in perception and values.

If a town hall meeting is held and everyone is asked to sit down around the table and describe their vision of the future, it will soon be discovered that there are multiple visions. Each participant, based upon their perception of reality, will correctly describe an image of the future based upon their experiences and values (LeShan, 1976).

This is a limited vision. As the old proverb says, "to the blind change comes suddenly." It is difficult for participants to imagine that which they have not experienced or learned about. The vision of the future is limited to an extrapolation of the known. It is a principle of continuity in which we slowly push yesterday past today into tomorrow. But the problem with today is that tomorrow is not what it was yesterday.

Imperatives and Externalities

Strategic planning appeared in recent years as a community activity to encourage economic development. The environmental scan, as an element of strategic planning, is an activity that serves as a catalyst for community visions. The environmental scan not only seeks to look over the horizon of the known world of the community, but it also scans and reports on emerging imperatives from the larger systems outside the community. These externalities are anticipated influences that may be perceived as threats or opportunities for the future of the community. This is an elementary community learning process.

Conflict arises because there are multiple visions or realities within the perception of the community itself. The learning community must move beyond strategic planning methods and utilize techniques and methods that will create a shared vision, a common paradigm of the community system. Only then can external influences and change be discovered and intelligently evaluated.

Change Strategies

How can the learning community create a shift in individual and collective paradigms? The answer is found in the classical theory and practice of organizational development, behavioral sciences and adult continuing education processes. There are three traditional categories of change strategies that can be employed in the learning community. These are the empirical-rational strategies, the normative-reeducative strategies, and the power-coercive strategies (Chin and Beene, 1976, p. 22-45).

Applying the normative reeducative strategies to the learning community means that changes in behavior are changes at the personal individual level and at the socio-cultural level, in both values and actions. These changes are alterations in the normative structures, in institutionalized roles and relationships, as well as in cognitive and perceptual orientations.

THE LEARNING COMMUNITY PROCESS

This is a process for developing a community plan over a period of two or more years. This process and its products will meet the various statutory and professional requirements for community planning in the Great Plains region. Compliance with these requirements is important if the community is going to use its governmental powers to shape and control change through devices such as zoning, subdivision, building and infrastructure regulations.

Programs of anticipating change and dealing with change are focused on community planning. Planning is, after all, the use of forethought in community actions. The learning community, seeking a preferred future, must create the strategy, the road map, the path to the achievement of this vision. Planning is a learning process that is both participatory and anticipatory. It is anticipatory as a process that, according to the prime directive of community development, enables the members of the community to participate in the decisions that affect their lives (Luther, 1991).

This is also an anticipatory learning process in that the members of the community seek to anticipate the consequence of their actions rather than merely reacting to them. It is a matter of proactive versus reactive community action.

Capacity Building

There is an important point here. The learning community approach, described in this paper, assumes presence of a community development professional as a consultant to the community. The role of the community developer in this learning community process is primarily that of educator rather than technical consultant. In this approach, the role of the consultant is to develop the capacity and ability of the community to plan for itself over the long run. If the community development consultants do this well, they will never have to return (Luther & Luther, 1981).

The Process

The learning community process is essentially a systems analysis, problem solving approach. The flow chart in Figure 1 illustrates how this process works in the community setting. Each of the major components of the learning community process will be discussed in following sections of this paper.

PROBLEM RECOGNITION

Typically, problem recognition starts with a few individuals who become concerned and seek to deal with the problem. These few individuals are generally the core of the initial stages of the participatory learning community process. The community developer may use the core group as the foundation for larger community participation in the process. The community developer shares information with them on how to conduct the participatory process.

GOALS SETTING

The first public "town hall" meeting is announced as a goals setting activity. This is a traditional community development strategy except that the activities use small group futuring exercises to obtain visions of a preferred community future, rather than just a reactive future based on trend extrapolation. The goals setting process is essentially asking the question, "how do you wish your community to appear and function in the future?"

Transcendental Imaging

The learning community's vision of the future is often limited to the domain of its education and experience. If they haven't seen it or read about it, how can citizens imagine it? The goals setting activity includes images from video, film, or slides, which illustrate possible futures. It is the beginning of the community learning process—discovering and imagining possible futures. Often times, these new images (both good and bad) serve as a catalyst and stimulate the community into seeking radically new goals or, at least, significant departures from their current development trends.

Transcendental imaging is useful in helping the learning community to escape the bounds of the local system domain by exploring the examples of communities from other geographic regions, from other cultures and from other times. "The eschatological or transcendent, is an element which enables the visionary to breach the bonds of the cultural present and mentally encompass the possibility of a totally other type of society, not dependent on what human beings are capable of realizing" (Boulding, 1976, p. 431-444). There may be an image, a solution, visualized in the small rural towns of Australia, Ireland, Italy, China, or Israel. The first part, then, of the goals setting activity is given to a presentation of images of possible futures.

Futuring Activities

Futuring activities are used in this part of the meeting. Rather than simply reacting to their expected or probable future, based on trend extrapolation, participants are asked to create a qualitative and compelling vision of a preferred future, free from the bounds of history, probability and trend extrapolation (Ziegler, 1991, p. 516-527). Focus questions are based on the topics for the community's plan: commercial development, industrial development, services, residential development, recreation and parks, agriculture, infrastructure, transportation, historic preservation. Each small group is asked to describe their vision of how this aspect of the community should appear in the long-term, usually 20 years in the future.

Anticipatory Learning

A follow-on meeting utilizes futuring techniques to learn about the possible effects of the participant's choices. Here, the effort is to anticipate the effects of change. Futuring techniques are used explore the implications of these choices. This is both an anticipatory and participatory community learning process.

At the end of this second town hall meeting, participants are asked to vote on the vision statements. The choices from this vote become the basis for the community's long-range goals. The results are transcribed, typed and made available to the public.

Consensus Goals

These goals are not a priori given, but were derived from the community learning activities and intelligent choices. The consensus agreement on the goals statements represents one element of the single shared vision of a preferred future. The validity of these community visions as goals is verified by the use of a community-wide attitudinal survey.

COMMUNITY SURVEY AND ANALYSIS

The learning community is now faced with the task of discovering the path from today to tomorrow. In order to understand what could be and should be, the community needs to learn what it was and what it is.

Self-Study

The means to learning at a community scale include the use of the residents, of all ages, in exploring, describing, and explaining the community's environment—its operating system domain. Ad hoc work groups, consisting of "community analysts," are formed to conduct these studies. Each work group has a specific task and the group is dissolved once the task is completed. The work groups report regularly to the large group—the community. Immediate rewards are provided for involvement in the learning community process by featuring news stories about the groups' work, or having them give reports at town hall meetings, or making their reports available in the public library.

This is the heart of the learning community process. It is an act of self-study. Members are telling, drawing, mapping, writing and explaining how their community operates and why. The importance of phenomena and processes at work in the community's environment are made explicit. As these information reports are shared, the paradigms in the community slowly begin to shift as individuals begin to assimilate the system-wide information and form a new reality in their minds. Slowly, values and behaviors will follow these shifts.

The extensive use of maps and graphics allows for the display of non-quantifiable and intangible socio-cultural and environmental values. Because they appear in visual form, they cannot be ignored. Because they are mapped, they have locality relevance. The use of realistic visual symbols creates a single vision, with little of the ambiguity of interpretation common to written and oral reports.

Checklists for Sustainability

The learning community's self-study is based on the tripartite aspect of sustainability. That is, the socio-cultural, economic and environmental aspects of the community's operating environment are explored, described and explained. This approach provides the framework for survey and analysis.

Environmental checklists seem to provide the best model for the learning community's survey and analysis. There is an example of an environmental checklist shown in Figure 2. But the tripartite nature of sustainability demands that the environmental checklist be enhanced to provide a meaningful framework for sustainability. Such a checklist will serve, not only at this initial planning point but also in the later monitoring and feedback stages of the learning community process, to evaluate change.

Such a checklist for sustainability will serve as an educational tool for it will provide the means of easily assessing the value of existing phenomena and processes, as well as the probable effect of proposed changes to their existing community system. The use of the sustainability checklist, repeatedly, by local decision-makers, will reinforce learning by the individual decision-makers and learning by the community.

Sustainability checklists are being researched and developed by many individuals and organizations at this time. Although there is little literature currently available, there are a number of discussion groups on the Internet. The search for indicators is the subject of significant future research (Callenbach, Capra, Goldman, Lutz, and Marburg, 1993).

Economic survey and analysis. The economic values must be analyzed in terms of the community's existing situation. This survey and analysis will describe the existing economic phenomena and processes. Such a survey and analysis will also provide information regarding unsatisfied potential and derive marketing information that can be used to recruit new economic activities to meet the unsatisfied potentials.

Such economic survey and analysis can also allow the community to conduct contingency analysis to determine the answers to the "what if" questions. Having set up the description of existing economic situations on a spreadsheet program, it is very easy to use the recalculation function of the computer program to discover and describe what would happen if the population grew or declined at varying rates. The community analysts can also determine what would happen if their town consumed all the regional market in any given category.

This latter capability to model regional economic impacts of community market decisions is critical in determining the sustainability of the regional community. This is important to multicommunity collaboration. This capability to visualize potential economic change enables the learning community to anticipate the consequences of their actions. Moral and ethical issues of multicommunity collaboration may arise when the learning community must decide whether to take business away from a competing community and thus adversely affecting that community's sustainability.

Typically, the economic survey and analysis is based on a comprehensive and standardized framework that may become the basis of a learning community checklist. The framework includes the traditional categories of economic activity. This economic survey and analysis framework is then used to array data regarding existing capacities in terms of available square feet of gross leasable floor space and total sales per square foot. Analysis of existing population and the market area will derive potential sales per square foot. Reference to trade publications will derive typical sales per square foot. The community analyst can easily determine if the existing community is operating at, below or above its potential. These data also make it easy to forecast "what would happen if," based on changing population variables (Luther, 1979).

Issues regarding the evaluation of these economic activities, including cost-benefit analysis, sustained returns, intergenerational economic welfare, and green economics are now emerging in the literature in publications such as Clem Tisdell's (1993) *Environmental Economics: Policies for Environmental Management and Sustainable Development.*

Socio-cultural survey and analysis. This activity seeks to determine the community's attitudes or values regarding its existing and potential situation. The goals setting process, employing futuring techniques, is one means of collecting such information. This group process information is usually augmented by a thorough survey of the community. In a small rural town, a 100 percent survey may be possible. In larger communities, a sample methodology may have to be used to survey only a portion of the community's population.

The goals statements derived from the town hall meeting, in combination with the community attitudinal survey, will answer a number of questions. Not only can the community analyst find out what types of change are desirable or undesirable, but also determine where within the community such change is acceptable. Maps and sketches will enable the community to accept or reject various types of development or changes in various geographic locations. These socio-cultural values can then be arrayed as a series of questions to be used in the sustainability checklist.

Environmental survey and analysis. This activity generally proceeds on the basis of an environmental checklist, such as those employed in environmental impact assessment. As these data are collected, it is important to give them social value. One effective mean of giving social value to intangible and unquantifiable environmental phenomena and process is to use a graphic device for storing, manipulating and disseminating these data. In fact, the use of such a graphic device will allow the community analyst to convert the data into meaningful information.

The graphic device is known as "McHargian analysis" and employs a mapping technique to record the character and distribution of environmental phenomena and process (McHarg, 1969). These data are displayed on standardardized base maps, allowing "stacking" of the maps into composites to yield information regarding synergistic groups of phenomena and process. The strength of this approach is that these phenomena and processes cannot be ignored: they are rendered explicitly in color. There is also the power of locality relevance. The learning community is able to determine how proposed changes will affect these environmental attributes. Similarly, the community may learn how the existing environmental attributes will affect a proposed action. The invisible is rendered visible.

The McHargian approach is useful in providing a basic understanding of the historical and existing environmental situation of the community. The maps and information provide a foundation from which all future proposals may be evaluated. It is a major asset in the learning community. As these analyses are conducted by ad hoc work groups with in the community, there is a great deal of knowledge generated and shared with credibility. The McHargian approach relies upon existing scientific data that are timely and accurate.

The sustainability checklist. The critical aspects of sustainability, economic, socio-cultural and environmental values, can be surveyed and analyzed in a comprehensive and standardized approach by using a sustainability checklist. Each major section of the checklist provides not only the list of items for survey and analysis, but also provides guidance as to what the analyst wants to find out—what the research question should be.

These three categories of community survey and analysis provide the basis of understanding what was and what is in the community's environmental domain. From this base, projections and forecasts may be devised to learn about what could be and, more importantly, what should be.

Some guidance on elements of a sustainable community is discussed in a recent report from the Centre for Human Settlements at the University of British Columbia (Roseland, 1992). This book, *Toward Sustainable Communities: A Resource Book for Municipal and Local Governments*, illustrates how communities can apply the concepts of sustainability in governmental functions.

FORECASTS AND PROJECTIONS

Traditionally visions of the community's future are based upon quantitative trend analysis. This is very different from the qualitative visioning activities used to create community goals. In this manner, the historical pattern of growth (typically population growth) is extrapolated into the future.

The learning community approach recognizes that the probable future is only one of many possible futures. Accepting the premise that trend is not destiny, the learning community seeks to "bend the trend" and visualize futures in a very different way. Escaping the paradigm with which we have been programmed, the community seeks to imagine and describe a possible future, however improbable.

A number of "possible futures" projections are made, all of which meet the goals of the community. If their community has a declining population but wishes to have steady state population or growth in the population, this is described as a possible future. If, on the other hand, the community feels it is growing too big, too rapidly, the community may wish to explore the possibility of a steady state.

Keying in on population projections for each possible future condition, the learning community can identify the quantitative demands for land use, transportation, and services. This demand analysis can be used to establish a needs statement, what is called a "need gap," for each possible future community state.

COMMUNITY NEEDS AND OBJECTIVES

The learning community may, at this point, reject a number of quantitative projections whose demands fall far outside the realm of reality or the community's capacity to achieve. Still other projections are rejected because they do not meet the community's goals. There will be, however, a significant number of projected community futures that meet the community's goals and are, at first analysis, achievable. These images began to form the basis of a preferred future.

This activity of forecasting and projecting future demands for land use, transportation, and services is another critical action for the learning community. While some members of the community formerly believed one image or another represented the only reality, this learning activity has the capacity to cause paradigm shifts as the true demands of various possible futures are disclosed.

The estimation of the forecasted needs of the community creates a series of targets to be achieved by alternatives. These targets, in terms of the demands of different community configurations, become the objectives for a series of sketch plans.

ALTERNATIVES AND SKETCH PLANS

The learning community uses ad hoc work groups to create a series of sketch plans of possible future conditions. These sketch plans illustrate land use, transportation, and services—all which will meet the projected needs. These illustrations take the form of colored maps and three-dimensional sketches of critical elements of the landscape and townscape. At this point, the community is involved in participatory design.

The learning community can and should rediscover the traditional townscape elements that represent its heritage. These historical elements are important basis of a unique sense of place in time and space. Visual techniques, as well as images, for this activity may be found in books such as Randall Arendt's (1994) *Rural by Design: Maintaining Small Town Character*.

Participatory Design

Participatory design empowers the learning community to create visual images of its environmental domain. The drawing pencil is removed from the hand of the professional architect or landscape architect or planner and firmly placed in the hands of the members of the community design work group (Luther, 1990, p. 33-56).

These three-dimensional sketches, like the environmental analysis, provide the foundation from which to evaluate change. For each of the alternative sketch plans, these human-scale, eye-level, renderings of street scenes, landscapes, and building facades are modified to show, realistically, what would happen as a consequence of such changes.

A good handbook for the participatory design approach is Randolph Hester's (1990) *Community Design Primer*. This handbook not only provides knowledge about community design as a participatory activity, but it also teaches skills in drawing and problem-solving by design.

The power of the three-dimensional illustration easily overpowers the traditional two-dimensional maps of the planner. The learning community can visualize what it would be like to walk and drive through this townscape, to work in this future town, to play in this future landscape.

Moreover, the community design work group can add even more realistic power to this vision of the future by rendering the images in a four-dimensional aspect. That is, the change is shown over a time series, rather than the typical one-shot image of the completed state. Such time series illustrations enable the learning community to understand that change is incremental and comes at a certain pace rather than all at once. This lessens the shock of change.

THE PREFERRED FUTURE

The learning community must now make an informed and intelligent choice from these alternative sketch plans—these alternative images of the future of their town. How do they proceed?

The sustainability checklist is again employed as a learning and decision-making device. Each alternative is evaluated according to the checklist. The costs and benefits of each sketch plan are described and explained.

At another community-wide town hall meeting, the alternative sketch plans and the analysis of their sustainability, are displayed on the walls in a manner to allow examination and discussion by the learning community. This meeting features a presentation of each alternative sketch plan, and a discussion of the finding of the sustainability analysis.

The members of the learning community may select one alternative, may reject all alternatives, or may synthesize several alternative sketch plans into a new vision. But, at the end of the evening, the learning community has selected an image of its preferred future. The learning community has achieved a single shared vision.

THE COMMUNITY'S PLAN

The selected sketch plan is then fully developed by another ad hoc work group. The details of the plan, meeting professional and statutory requirements, are published in a document that is the preliminary draft of the town's comprehensive plan. Make no mistake, this is the community's plan. It is not a plan devised by some short-term visiting technical consultant. This is a plan devised by the learning community in a clear act of self-help and self-determination. Having ownership in the plan is essential to maintaining and enhancing the plan over time.

Following the public review of the preliminary draft of the community's plan, it is adopted by resolution and becomes an official document of the community's decision-making process. All future proposals for change will be evaluated on the basis of this plan.

Format

The format of the community plan emphasizes the essential elements of the town: the land use, transportation, services, recreation, historic preservation, etc. Each element of the plan forms a separate chapter in the document. Each chapter starts with the description of the preferred future. Remember the focus questions in the first town hall meeting? For each chapter there will be goals and objectives. Following the vision and the need, there will be policy statements that represent the community's voice, speaking in unison, of how it prefers this vision to be achieved and sustained. Finally, each chapter contains the details of how this image of the preferred future will be transformed from imagination to grass, concrete, steel, wood, and water. The sustainability checklist emerges as measures of effectiveness for each element of design and development. These written and graphic policies and guidelines, then, seek to teach the newcomer, the proposer of change, the values of the learning community.

Proposed actions that represent only short-term survival activities that do not effectively achieve the community's criteria for sustainability should be rejected by this decision-making process. Given the anticipatory and participatory character of the plan's development, there should be little community conflict in these decisions.

Implementation

Implementation of the community's plan can be achieved through sustainable policies, regulations, and building codes, such as those developed by Melbourne, Australia. Here, the Victorian Department of Planning initiated a series of workshops, "Shaping Urban Futures," in 1989. The resulting regulations, the *Victorian Code for Residential Development* (VicCode), are "directed at achieving safe, stimulating, and sustainable communities by addressing the detailed design of development proposals" (Morris, 1993, p. 50-52).

Implementation can also be achieved by developing a tactical plan of action based on the objectives and targets created in this planning process. A series of self-help local development initiatives, such as those introduced in Australia with the Country Centres Project (Robinson, 1993). This project facilitated local self-help processes in localities suffering from the effects of structural change, a conditional similar to that found on America's Great Plains. The County Centres Project, for example, sought to

- improve local economic performance by identifying viable local economic opportunities and coordinating means for their realization;
- improve federal and state government awareness of local needs so that a better coordinated and more effective targeting/delivery of their programs could occur at the local level; and
- develop effective models for the participation of community groups in self-help local development.

A significant discussion of the community economic development strategies

being undertaken on the Great Plains may be found in Choy and Rounds (1992) *Community Development Strategies of the Northern Plains*.

Monitoring

Over time, a monitoring function is created as the condition of the community system domain is scanned and changes are noted. Like a thermostat, the learning community reacts to the change and causes a corresponding change in its governing functions to correct the condition. It is as if the learning community is traveling through time and space on a critical path. The boundaries of this path represent parameters of unacceptable or unsustainable system behavior. The learning community, monitoring its environment, senses the deviation from the critical path and issues instructions to bring the community back to the desired trajectory into the future—ever in quest of its goals.

CONCLUSION

What has education got to do with all this? The role of learning is critical in capacity building among the members of the community. Capacity building enables the community to imagine, visualize, plan, design, develop, and sustain the community as it moves forward into the future. It is an act of local self-determination and self-help.

In an age of increasingly scarce resources available for small rural towns, the capacity to "do it ourselves for ourselves" is critical to the survival and persistence of the community. In an activity that may be described as "community self-actualization," the rural small town explores, discovers, describes and explains the elements, attributes, and synergy of its total operating environmental system. The learning community not only conducts this survey and analysis, but it learns about itself in the process.

Community learning leads to shared understanding and knowledge about the economic, socio-cultural and environmental phenomena and processes at work in the community. Community learning leads to knowledge and skill in evaluating proposed changes that may affect these operating systems within the community's domain. Community learning leads to an understanding of the need for and consequences of multicommunity collaboration as a means of sustainability. Community learning results in a declaration, the community voice, expressing a clear and compelling vision of its own future—a future of its own making.

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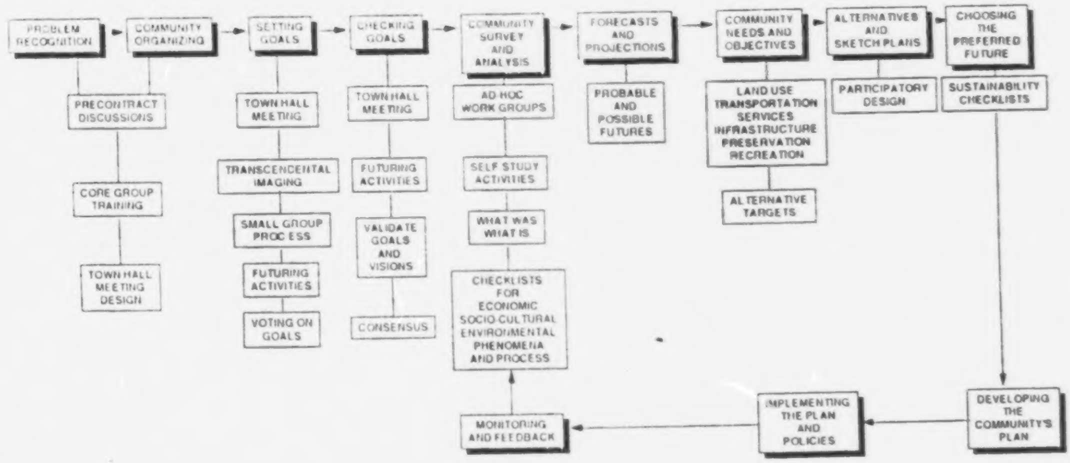
Figure 1: The Learning Community Process



PROBLEM RECOGNITION
COMMUNITY ORGANIZING
SETTING GOALS
CHECKING GOALS
COMMUNITY SURVEY AND ANALYSIS
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ALTERNATIVES AND SKETCH PLANS
CHOOSING THE PREFERRED FUTURE
PRECONTRACT DISCUSSIONS
CORE GROUP TRAINING
TOWN HALL MEETING DESIGN
TOWN HALL MEETING
TRANSCENDENTAL IMAGING
SMALL GROUP PROCESS
FUTURING ACTIVITIES
VOTING ON GOALS
TOWN HALL MEETING
FUTURING ACTIVITIES
VALIDATE GOALS AND VISIONS
CONSENSUS
AD HOC WORK GROUPS
SELF STUDY ACTIVITIES
WHAT WAS WHAT IS
CHECKLISTS FOR ECONOMIC SOCIO-CULTURAL ENVIRONMENTAL PHENOMENA AND PROCESS
PROBABLE AND POSSIBLE FUTURES
LAND USE TRANSPORTATION SERVICES INFRASTRUCTURE PRESERVATION RECREATION
ALTERNATIVE TARGETS
PARTICIPATORY DESIGN
SUSTAINABILITY CHECKLISTS
DEVELOPING THE COMMUNITY'S PLAN
IMPLEMENTING THE PLAN AND POLICIES
MONITORING AND FEEDBACK

Figure 2: An Example from an Environmental Checklist

(14) Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

(a) Fire protection? ....

(b) Police protection? ....

(c) Schools? ....

(d) Parks or other recreational facilities? ....

(e) Maintenance of public facilities, including roads? ....

(f) Other governmental services? ....

Explanation: ....

(15) Energy. Will the proposal result in:

(a) Use of substantial amounts of fuel or energy? ....

(b) Demand upon existing sources of energy, or require the development of new sources of energy? ....

Explanation: ....

(16) Utilities. Will the proposal result in a need for new systems, or alterations to the following utilities:

(a) Power or natural gas? ....

(b) Communications systems? ....

(c) Water? ....

(d) Sewer or septic tanks? ....

(e) Storm water drainage? ....

(f) Solid waste and disposal? ....

(17) Human Health. Will the proposal result in the creation of any health hazard or potential health hazard (excluding mental health)?

Explanation: ....

(18) Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open the the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?

Explanation: ....

(19) Recreation. will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

Explanation: ....

(20) Archeological/Historical. Will the proposal result in an alteration of a significant archeological or historical site, structure, object or building?

Explanation: ....

III. SIGNATURE

I, the undersigned, state that to the best of my knowledge the above information is true and complete. It is understood that the lead agency may withdraw any declaration of nonsignificance that it might issue in reliance upon this checklist should there be any willful misrepresentation or willful lack of full disclosure on my part.

Proponent: ....

Extracted from the Washington State Environmental Policy Act Guidelines, Chapter 197-10 WAC.

THE RURAL SERVICES INSTITUTES NETWORK AS A STRATEGY FOR ASSISTING RURAL COMMUNITIES IN NEW YORK STATE

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ABSTRACT

The New York State Office of Rural Affairs has developed an innovative network of Rural Services Institutes (RSIs) located at colleges and universities throughout the State in order to help meet the needs of the State's rural communities. Through the resources and expertise available at college campuses, the RSI network blends the best of government and academe's community service functions to bring a wide variety of services to rural governments, businesses, organizations and individuals.

Currently, 17 RSIs are operating to meet the unique needs of the communities in which they are located. The RSIs operate with minimal cost to the state and involve few bureaucratic constraints. Each RSI shares expertise and resources with other participating RSIs, providing rural communities with a collaborative, statewide resource network.

This paper will discuss the development and implementation of Rural Services Institutes at colleges and universities throughout the rural regions of New York State, including:

1. How the idea for the RSI network was formed;
2. How the RSI network was implemented;
3. How RSIs are structured at each college;
4. The functioning and coordination of the RSI network;
5. One case study: The actual working of the RSI at the State University of New York College at Potsdam.

INTRODUCTION

Although most people think of New York City when they think of New York, nearly 3.5 million people live in the rural areas of New York State. Rural New York comprises 88% of the State's total land mass. In fact, rural New York would be the 36th largest state, roughly equivalent to the size of Kentucky, Indiana or West Virginia. Rural areas in New York State, like their counterparts across America, frequently suffer from a lack of fiscal and technical resources necessary to provide basic community services or to promote development and growth. In an effort to address the needs of its rural communities, in 1986, New York State created the State Office of Rural Affairs.

Since then, one of the ways that the State Office of Rural Affairs has met the needs of the State's rural areas is through an innovative network of Rural Services Institutes (RSIs) located at colleges and universities throughout the State. Through the resources and expertise available at member campuses, the RSI network blends the best of government and academe's community service functions to bring a wide variety of services to rural governments, businesses, organizations and individuals. Currently, 17 RSIs are operating to meet the unique needs of the communities in which they are located. The RSIs operate with minimal cost to the State and involve few bureaucratic constraints. Each RSI shares expertise and resources with other participating RSIs, providing rural communities with a collaborative, statewide resource network.

This paper will discuss how the idea for the RSI network was formed and implemented, how the RSIs are established and structured on various campuses, the purpose and functions of the RSIs, the operation and coordination of the RSI network, and a case study of the working of the RSI at the State University of New York College at Potsdam.

BACKGROUND

The rural areas of New York State, like other rural areas of the country, suffer from geographic isolation and limited fiscal capacity, which, generally, have resulted in such problems as higher rates of poverty and unemployment; lower levels of educational attainment, employment skills, and vocational training; and more limited access to health care, social services, and modern telecommunications systems. The rural areas of New York State have a shortage of physicians and other health care providers as well as difficulty in attracting personnel to areas with the greatest need for services. Many rural hospitals in New York are technologically obsolescent with respect to their facilities and equipment, and many rural residents face gaps in health care coverage between jobs. Other institutions, such as school districts, face higher costs because of the diseconomies of scale of operating in a rural area.

Further, the lack of private sector capital, adequate public transportation, and technological capacity has inhibited economic growth in most of New York's rural areas. In the areas where growth is occurring, communities are confronted with a lack of experience and consistency in municipal land use practices. Rural areas have a need for increased planning and technical assistance, with an emphasis on mitigating developmental impacts on the rural land resource base, while simultaneously increasing the area's economic viability.

Income in the rural counties of New York State tends to lag behind that of the non-rural counties, even when the national economy is strong. During the eight-year period between 1980 and 1988, income in the rural counties of New York State rose only 79.4 percent, while income in the non-rural counties rose 83.8 percent. Comparing per capita incomes by county, the ten counties with the lowest per capita income in 1978 were all rural. In 1988, the ten counties with the lowest per capita income were, still, all rural. Of the ten counties with the highest per capita income in 1978 and 1988, only one was a rural county.

Employment figures for the rural areas of New York State are equally disheartening. Throughout the 1980s, average unemployment rates were significantly higher in the rural counties than in the non-rural counties of New York State. And, as can be seen below, the rural counties have consistently had higher unemployment rates than New York State as a whole.

	1980	1988	1989
RURAL COUNTIES	8.3%	5.3%	6.2%
NON-RURAL COUNTIES	6.7%	3.7%	4.5%
NEW YORK STATE	7.5%	4.2%	5.1%

As might be expected, high unemployment tends to be endemic to some counties. Of the ten counties with the highest unemployment rates in 1980, nine were rural. Eight of those nine counties were among the ten counties with the highest unemployment rates again in 1989.

While the rural areas of New York State face these daunting and often seemingly insurmountable problems, many public and private policy makers and the media focus on the ills that plague the urban areas of the State, like New York City. The lack of awareness of the nature and extent of the problems in rural areas by policy makers and the media, and the inability of urban people to understand rural concerns, is, often, tantamount to the rural problems themselves. On account of that lack of understanding, rural areas, in the past, have received limited state and federal resources, and have been undermined by regulatory standards and procedures that do not take into consideration the unique circumstances and needs of rural communities.

THE HISTORY AND ROLE OF THE STATE OFFICE OF RURAL AFFAIRS

In order to help State government better address the needs of the 3.5 million people living in rural New York, the State Office of Rural Affairs was established by the Rural Affairs Act of 1986. The Office was established in the executive department of New York State government, making it the first cabinet-level state agency in the nation devoted solely to the interests and needs of a state's rural areas. The Office is headed by the Director of Rural Affairs, who is appointed by the Governor, with the advice and consent of the State Senate.

In creating the Office of Rural Affairs, the Governor and State Legislature demonstrated their recognition of the fact that the State's rural regions have been characterized by inaccurate awareness and understanding, resulting in laws, regulations, policies and programs that do not completely address the real needs of the people living in the State's rural areas. They also recognized that the diversity of the rural regions of the State, with their abundant natural, cultural, human, and community resources, contributes greatly to the quality of life of all people of the State and, hence, to a healthier and more prosperous State.

It was found that many useful and innovative responses to rural needs would be possible, if a permanent, more focused and coordinated interdisciplinary approach to addressing rural problems and opportunities were made available through State government. Through the creation of the Office of Rural Affairs, the State's policy makers sought to amplify the efforts of existing agencies and individuals who are interested in such rural policy areas as human services and community life; health care; education; business, economic development, and employment; agriculture; environment, land use, and natural resources; transportation; community facilities, housing and community revitalization; and local government management.

Thus, the purposes of the Office of Rural Affairs are to promote cooperative and integrated efforts to address rural needs statewide; to recommend to the Governor and the Legislature policies and plans to meet rural needs; and to serve as a one-stop contact point for rural governments, service providers, and State and federal agencies interested in rural policies and programs of the State. The Office accomplishes these purposes through the use of diverse means and methods.

For example, the Office of Rural Affairs operates the Rural Assistance Information Network (RAIN), a computer service containing over 1700 State and federal financial and technical assistance programs. The information on RAIN is accessible via computer modem 24 hours a day, 365 days a year, and is provided free of charge, except for the cost of the telephone call. In addition to the federal and State financial and technical assistance programs, the RAIN database includes data from the U.S. Census Bureau, the National Physicians Register, the New York State Department of Labor self-search job database, a legal section and legislative directory, and a message-based electronic mail system for all users. Since everyone does not have access to a computer and modem, the Office of Rural Affairs has designated 90 organizations throughout rural New York that serve as public access points for RAIN. These organizations have agreed to make their equipment available for RAIN searches as a service to members of their communities.

The Office of Rural Affairs also produces a yearly series of live, interactive, video teleconferences on its Rural Satellite Network (RSN). Through this service, the Office is able to use modern technology to bring technical assistance and information to the most rural areas of New York State in a very cost- and time-efficient manner. Topics that have been covered on the RSN include grantsmanship, zoning and land use planning, municipal liability, rural housing, and rural emergency medical services.

THE ESTABLISHMENT OF THE RURAL SERVICES INSTITUTES

In the effort to fulfill its role to promote cooperative and integrated efforts to address rural needs, in March 1989, the Office of Rural Affairs began establishing Rural Services Institutes (RSIs) at educational institutions across the State.

The presence of higher education institutions in rural areas of New York State was found to be an under-utilized asset. The State University of New York (SUNY) is the largest and most diverse public multi-campus university system in the world. Thirty-six of its sixty-four campuses are located in rural regions of the State. The independent sector of higher education in New York State comprises over 100 campuses and is the largest in the nation. Twenty-eight of the campuses are located in rural counties throughout the State. The faculty and staff at these institutions could provide educational resources and expertise that would be invaluable and, otherwise unavailable in rural areas, for skill enhancement and technical consultation.

Further, the RSIs on State University campuses help to fulfill the mission of the State University of New York, which pledges the sharing of its resources and expertise with the business, agricultural, governmental, labor and nonprofit sectors of the State through a program of public service for the purpose of enhancing the well-being of the people of the State of New York.'

PURPOSE AND FUNCTION OF THE RSIS

The purpose of the Rural Services Institutes (RSIs) is to facilitate the efforts of local agencies, individuals, and the private sector in developing cooperative responses to rural needs. The RSIs accomplish this by providing technical and educational assistance, and by encouraging a comprehensive, strategic approach to rural problem solving with four guiding principles:

1 **Working together to enhance the quality of life for all rural New Yorkers:** Many public agencies, rural businesses, and community organizations are interested in enhancing the quality of life in rural New York. Too often, however, these entities are working against each other to advance their own parochial interests. Other times, they are not combining their efforts to achieve the greatest possible gain. The constituents of rural New York must work together in order to solve the problems that plague their regions and to enhance their collective quality of life.

2 **Taking a regional approach to problem solving:** Although a number of State and federal agencies are involved in rural development and revitalization efforts on a large scale, many of the problems and issues that confront rural areas are of a regional or local nature. Furthermore, even with issues of broad significance, the need still exists for technical assistance and collaboration at the regional or local level to access State or federal programs and decision makers. The RSI concept uses a regional approach to addressing rural problems. This approach often results in solutions that can be applied in other regions of the State and statewide.

3 **Coordinating the RSIs into a statewide network:** Many of the issues and problems that arise in rural areas are common throughout all regions of the State. Rural regions must collaborate in order to successfully address common rural needs. The RSIs in the various regions of the State may coordinate their activity to address issues or solve problems common to more than one region. In situations that require a multi-regional or statewide approach, the Office of Rural Affairs serves as a coordinator and facilitator.

4 **Serving as a Resource for the Office of Rural Affairs:** The rural areas of the State have an advocate in the State government to represent their needs and protect their interests: The State Office of Rural Affairs. The RSIs serve as a resource to provide information on the needs and goals of their regions to the Office of Rural Affairs. In this manner, the Office of Rural Affairs can provide leadership in State government in addressing the issues that affect rural areas. The Office of Rural Affairs can use its cabinet-level agency status to access the decision makers and policy makers in the executive and legislative branches of State government to effect change for rural New York.

In accomplishing its purpose, the RSIs use the resources found on the college campus to provide a rural area with any assistance that may help the area to meet a local or regional need or goal. Typically, RSIs:

- provide rural community leaders with technical assistance, training and education; assistance in rural economic development and revitalization; assistance in local government management; assistance in grantsmanship training; and community planning;
- serve as a clearinghouse for information needed by local officials and serve as meeting sites for satellite teleconferences produced by the Office of Rural Affairs and other agencies;
- undertake regional studies or projects, and sponsor regional conferences on relevant local rural issues; and
- serve as a public access point for the Office of Rural Affairs RAIN computer service.

DEVELOPMENT OF THE RSIS

The structure of the RSIs at participating colleges may vary, depending on several factors: the service mission of the college, the structure of college departments, and the particular interest of faculty and staff members of the college. The Office of Rural Affairs works with the college to formulate a development plan for the individual college RSI.

Generally, the process begins with a shared understanding between the college president and the Office of Rural Affairs of the initiative and commitment to support and maintain the RSI in a collaborative effort. The college president and other interested college faculty and staff meet with the director of Rural Affairs to discuss and sign an **Agreement** to form the Rural Services Institute. In a model RSI structure, the president of the college will designate an individual to be the **RSI Director**, who will be responsible for the operation of the RSI. The director will serve as the liaison to the Office of Rural Affairs and will report to the president of the college or a designee for the purposes of the RSI. The college will choose a department or program in which to "house" the RSI. Most colleges choose the Office of the President or a department of the college, such as: community affairs, economic development, or continuing education.

The president of the college will then appoint a **Steering Committee** to be chaired by the Director of the RSI. The steering committee will be composed of representatives of various college departments. The steering committee members will, largely, come from those departments whose services the RSI will use most. The steering committee's first task will be to conduct an **Inventory of Resources** available, both on-campus and off-campus. Resources on-campus include any faculty, administrators, students, programs, and equipment that may be of service to rural areas. For instance, student interns who receive credits for their work with the RSI may be used for much of the data gathering, research and special work of the RSI. Resources off-campus may include any federal, state, regional, or local organizations that could be of service to rural areas. The steering committee will meet on a regular basis to discuss, plan, implement and monitor RSI activities.

The steering committee will next help to define the RSI's geographical area of service. Then, with the assistance of the steering committee, the president of the college will identify and appoint a **Community Advisory Board** composed of representatives from local governments, businesses, community and other organizations to serve in an advisory capacity to the RSI regarding the types of assistance and services it should provide.

The next major task for the RSI director, the steering committee, and the community advisory board is to work with the Office of Rural Affairs to conduct a **Local Needs Assessment** to further identify those services that are needed in the area, but that are unavailable. The results of the inventory of resources and the local needs assessment will be used to determine how the RSI may be most effective in the community.

An initial conference should then be convened with local government officials, business leaders, representatives of community organizations, federal and State officials from the region, and other interested parties to introduce the RSI to the various groups in the community. This is an opportunity to address the issues facing the region, and to begin the process of formulating a plan to meet the region's rural needs. In addition to all of the community members, the director of the Office of Rural Affairs will be present at the conference, as will the college president, the RSI director, members of the steering committee and members of the community advisory board.

MODEL OPERATION OF THE RSIS

One person at the RSI, usually the director, will be appointed to serve as the liaison to the Office of Rural Affairs. This liaison will be responsible for periodic reporting to the Office of Rural Affairs; serve as the contact person for communications between the Office of Rural Affairs and the RSI, and attend meetings to discuss any issues relating to the RSI.

Each RSI is a voluntary organization and is intended to be self-sufficient and to operate independently. The State Office of Rural Affairs provides no monetary assistance to the RSI. The RSI must develop income sources or remuneration for its services, beyond any in-kind contributions that the college may offer, such as offices, secretarial support, computer and fax access, and RAIN access. Those sources of income or remuneration can include contracts for services with federal, state, or local governments; tuition for non-credit courses; and donations and grants from private or public sector parties. It is understood by all the RSIs, however, that one of the purposes of the program is to provide assistance that rural communities could not otherwise afford.

The RSIs are encouraged to initiate activities and projects and to operate independently. The Office of Rural Affairs, however, should be kept informed of major initiatives, and clearance should be obtained from the Office on press releases, major events and official publications or reports.

ROLE OF THE STATE OFFICE OF RURAL AFFAIRS

The Office of Rural Affairs is committed to provide the RSIs with technical support, including assistance during and after start-up. The Office of Rural Affairs will:

1. Designate a staff person who will act as the primary contact person for RSI requests;
2. Provide RSIs with technical and legal assistance in addressing the wide range of rural issues;
3. Provide community members with training and education through the Rural Satellite Network;
4. Serve as a clearinghouse for information on State and federal programs offering rural communities grants, loans, or technical assistance;
5. Provide information on resources offered by such agencies, as: regional economic development districts, regional planning and development boards, state regional offices, municipal governments, the federal/state rural development councils, cooperative extension agencies, resource conservation and development districts, rural enterprise teams, and other state, federal or local agencies and organizations involved in rural development issues;
6. Arrange conferences and meetings between RSIs and other interested groups to share ideas on rural development and revitalization issues;
7. Undertake statewide studies or projects to augment the work of the RSIs;
8. Provide a presence for the RSIs in the State Capital, assist the RSIs in accessing State policy and decision makers with regard to State rules and statutes, review and comment on State legislation and regulations that impact rural areas, draft and support legislation on behalf of the RSIs;
9. Organize and coordinate a statewide network of RSIs to expand the available pool of resources and expertise available to each individual RSI.

OPERATION OF THE RSIS AS A NETWORK

In order to facilitate the effective operation of the statewide network of RSIs, the Office of Rural Affairs serves as network coordinator. The Office of Rural Affairs and a planning committee, comprising representatives of each RSI, are responsible for developing administrative procedures to facilitate communication and information-sharing throughout the network.

As a network, each RSI can call upon the experience and resources of other RSIs in solving local problems. Together, all of the RSIs can address any rural issue on a statewide basis. The RSIs maintain contact with the Office of Rural Affairs, which relays information between and among the individual units in order to help solve problems and address current issues. Additionally, the Office of Rural Affairs is a participating member of many State and federal agency committees and not-for-profit organizations that serve rural areas. The information obtained through the Office's involvement in those organizations is also provided to the RSIs.

A CASE STUDY: THE WORKING OF THE RSI AT SUNY POTSDAM

In this part we discuss the working of the Rural Services Institute (RSI) at the State University College at Potsdam. SUNY Potsdam was the 14th Institution to join the RSI Network. The discussion includes: the process used to establish RSI at the College; its mission and goals; its administration and governance structure, including funding; the process used to determine priorities; services provided and their impact; and finally, linking its activities with the College's overall educational mission.

1. **Process:** Sometime in early 1990, the NYS Office of Rural Affairs (ORA) approached the President of SUNY Potsdam about starting a RSI to meet the service needs of rural communities in the North Country. Potsdam is a small rural village of about 12,000 people located in a rural region of New York State known as the North Country. SUNY Potsdam has a long and rich history of providing services to outside groups as a part of its tradition. The College traces its origin to the St. Lawrence Academy established in 1816 in response to a local community effort. Since the College owes its existence to the community, it, therefore, regards itself as an integral part of it. The College and community take great pride in each other and cherish the long and healthy relationship they have enjoyed over the last 178 years.

   The ORA request to SUNY Potsdam could not have been more timely. The College's new president, appointed in August, 1989, believes strongly in public service and regards it an important part of the educational mission. Early in his tenure, he quickly realized the special bond which existed between the College and the community. This played an important role in sharing the College's resources with the community. However, he also realized that the College lacked a coordinated structure for providing those services. Public service activities were being carried out by various departments and individuals within the College without much overall direction. The College lacked a single office to coordinate the delivery of such services.

   Thus, the request from the ORA to start a RSI provided the President with an excellent opportunity to take a serious look at the College's approach and commitment to public service. The President asked the College's Public Affairs Council, (a body responsible for examining the College's public service activities) to review the ORA request and to make its recommendations. The Council also viewed this as a great opportunity to take a closer look at the College's outreach activities and the manner in which they were being undertaken.

After careful review , the Council strongly recommended creating the Rural Services Institute at SUNY Potsdam and further recommended that the proposed RSI be charged with coordinating the College's public service activities to better serve the North Country. The President accepted the Council's recommendations and RSI was formally established by signing a memorandum of understanding with the New York State ORA in October 1990.

2. **Mission and Goals of RSI:** The RSI was designated as an umbrella organization responsible for coordinating the College's outreach activities. Specifically, its mission is to further enhance the interaction between SUNY Potsdam and its surrounding communities by making its intellectual and other resources available to help them improve their social and economic well being. This includes providing technical and other assistance to local governments, economic and social development organizations, labor, business, and other appropriate organizations. In providing services to outside groups, RSI was to be guided by the following broad goals:

   - Services provided must be meaningful and lead to improvement in the operation of the organization.
   - Work in close cooperation with other existing local and regional organizations. RSI should supplement and work cooperatively (not duplicate or compete) with existing organizations.
   - Services provided should be consistent with the College's educational mission and its budgetary resources and be beneficial both to the College and the community.

3. **Administrative and Governance Structure:** RSI at SUNY Potsdam functions under the Office of the President. A director, appointed by the President from among the teaching faculty at the College, manages its day to day operations. The faculty member is given release time from teaching duties. The director acts as a liaison with the ORA and maintains a close working relationship with local and regional organizations both public and private.

   The director is assisted by a RSI Steering Committee. This Committee is currently composed of 13 individuals representing various academic and administrative units within the College whose services are most frequently used by RSI for meeting outside needs. The Committee guides the work of RSI and monitors its activities. It generally meets four times a year and is chaired by the RSI director.

   Similarly, RSI receives input from outside community groups through the RSI Advisory Council. This Council is composed of 56 individuals who come from local government, health care, social services, business, labor, public education, social, cultural and economic development organizations in the North Country. The Council plays an important role in bringing the community perspective to RSI and the College. It also helps to build public support for the College in the community. The Council meets annually and is chaired by the College President, with the RSI director serving as the resource person.

   The director submits an annual report of RSI activities to the College President, members of the Steering Committee, the Advisory Council, the College's Public Affairs Council and ORA. The director keeps the college community informed of its activities through the College's weekly publication called **The Reporter.** Similarly, the outside community is kept informed through frequent news releases sent to the local and regional news media.

   Operation of the RSI is funded by the College as well as by outside groups. The half-time RSI director and a half-time technical assistant are on the College's payroll. However, the majority of RSI activities are funded through outside grants, registration fees, and consultation charges. Currently, the College provides about 20% of the RSI's annual funding, and the remaining 80% comes from outside sources. RSI, thus, imposes a minimal financial burden on the College's budget. It does not receive any financial support from ORA.

4. **Determination of Priorities:** In order for RSI to make a meaningful impact on the communities' social and economic well-being, it is important to know the type of services they believed were most important. RSI developed a lengthy survey to asses community needs. The questionnaire was sent to 350 organizations in the North Country region asking them to rank their needs in priority order.

   Nearly 60% of the survey questionnaires were returned. The results indicated an urgent need for many services. That was not surprising given the rural nature of the North Country. Most organizations, including local governments, are understaffed, under-funded, and often lack the needed expertise to carry out their work effectively. The most urgent needs identified were: grant writing assistance, computer assistance, health care, social services, planning and zoning, economic development, and fund raising. The study, Assessing Public Service Needs of Rural Communities in the North Country was published by RSI in November 1991.

   However, it was also important to know the type of expertise and other resources available at SUNY Potsdam which could be utilized to meet the community needs as identified in the study. RSI conducted a survey to determine the expertise of the College's faculty and staff and their willingness to participate in public service activities. The survey results were published in 1992 in the form of a directory: Potsdam College and Community Service.

5. **Services Provided and Their Impact:** RSI has striven to meet the community needs identified in the survey. It has utilized the resources available at the College and those of ORA. The following is the brief description of the services RSI continues to provide.

   a. *Grant Writing:* Since assistance in grant writing was identified as the number one community need, RSI accorded it a high priority. It approached the director of SUNY Potsdam Office of Faculty Scholarship and Grants to design a workshop on grant writing suitable for community people, most of whom were often unfamiliar with the grant writing process and were, thus, afraid to apply for grants.

   The director was extremely cooperative and developed a workshop on the basics of grant writing. The workshops were called, "ABCs of Grant Writing." Since the Fall of 1991, RSI has organized eight workshops including one held on May 26, 1994. Nearly 35 people have participated in each workshop.

   The demand for grant writing training still remains very high. RSI maintains a list of people who could not be accommodated in a particular workshop, and they are given priority for the next session. In addition, RSI published a Grant Preparation Handbook: A Brief Guide to Proposal Development written by Mr. Ronald Saufley based on the notes he used in conducting the workshops. About 300 copies of the Handbook have been distributed to various organizations and individuals in the North Country.

   RSI has received extremely positive feedback for its efforts in meeting this important community need. This, of course, could not have been accomplished without the cooperation from the director of the Office of Faculty Scholarship and Grants. RSI will continue to offer at least two grantsmanship workshops a year. The cost for this training is covered through a nominal registration fee of twenty dollars.

   b. *Social Services:* The North Country is divided into seven counties. Each county has a Department of Social Services (DSS) whose responsibility is to provide public assistance to the people eligible to receive it. Each DSS is headed by a social services commissioner. Staff development is extremely important for DSS employees in order for them to keep abreast of changing technologies, rules and regulations, and to enhance their overall efficiency and effectiveness.

   The North Country is sparsely populated, rural and distant from major population centers. Consequently, the DSS employees from the North Country counties had to travel long distances at considerable cost, both in time and money, to attend training workshops in major metropolitan areas of the State. While the training was often free, counties had to pay travel and lodging costs. It was not unusual for employees to spend three days away from work to attend a one-day training workshop. Naturally, this severely limited the number of employees who could take advantage of the training.

SUNY Potsdam was approached to consider providing training to the DSS employees locally. This need was also identified in the survey conducted by RSI. The social services commissioners saw the benefit of having local training for their staff which they could directly influence. RSI worked with the seven county commissioners and formed a North Country Coalition of Social Services Commissioners. The Coalition selects one of its members as chair. It determines the training needs of the DSS employees for each year and the mechanism for meeting those needs. RSI provides logistical and substantive support to the Coalition in theses areas: determination of the annual training needs, selection of instructors, development of curriculum for each training topic, delivery of training, evaluation of training; and, finally, execution of follow-up activities.

Since the inception of the Coalition in 1991, RSI has provided training to 1000 employees in more than 12 topics, such as, Team Building, Enhancing Productivity, Stress Management, Interviewing Skills, Secretarial Skills, and Communication Skills. The training workshops are held in different sites in the North Country so as to minimize travel time for the employees. RSI utilizes faculty from its own College and from other nearby colleges. These instructors know the area and the environment within which the DSS staff must work. RSI takes great satisfaction in facilitating this training program and, thereby, making an important impact on the overall effectiveness of DSS. The program is funded through an annual grant by the NYS Department of Social Services.

c. *Health Care:* Shortages of health care professionals was identified as a major problem in the RSI survey. To deal with this, RSI convened representatives from the St. Lawrence County Public Health Department and local hospitals in St. Lawrence and Franklin counties of the North Country. RSI decided to focus initially on two nearby counties and expand its efforts to other counties as it gained experience in this area.

A RSI Health Care Providers Advisory Group was constituted, and one of the representatives was selected to chair it. The Group decided to work toward utilizing local colleges and universities in alleviating the shortages of health care professionals in area hospitals. As its first task, the Group chose to document the degree of shortages of various health care professionals. RSI provided the logistical support in designing a questionnaire and in conducting the survey. The survey focused on 23 health care professions. Health care providers were asked to indicate the relative degree of shortages in each area. After reviewing the results, the Group targeted three major areas: Bachelor of Science in Nursing (BSN), medical technologists, and ancillary health professions.

The Group met with other colleges in the area to explore the possibility of developing a BSN degree program for those who already had a two-year nursing degree. The colleges were made aware that most nurses seeking a BSN would be taking courses on a part-time basis and most often in the evenings. The colleges were asked if they could adapt their curriculum and course offerings to meet this need.

The Group received positive responses from the two SUNY colleges in the area, one in Plattsburgh the other being SUNY Potsdam (located 90 miles apart). SUNY Plattsburgh, which offers the BSN degree, agreed to offer telenursing courses at different locations in the North Country so that the nursing students seeking a BSN would not have to travel too far. SUNY Potsdam, which does not offer a BSN, agreed to offer general education and other elective courses to meet the SUNY Plattsburgh BSN degree requirements. Thus, the two colleges, working together, responded positively to the local health care problem after being made aware of possible solutions by the Group.

Similarly, the Group met with admissions and other appropriate staff at SUNY Potsdam to explore the possibility of existing medical technicians with a two-year degree obtaining a Bachelor of Arts/Bachelor of Science (BA/BS) degree at the College within two years. After a careful review of the courses taken by a medical technician at a two-year college, and the additional courses and other requirements for the BA degree at SUNY Potsdam, it became clear that one could complete a BA in two years at SUNY Potsdam. However, such a program would require careful academic advising in the selection of appropriate courses. SUNY Potsdam offered to provide the needed academic and other advising support to medical technicians desiring to seek a BA at the College.

Thus, the Group was able to open up a new career path for the existing medical technicians. Currently, the Group is working on the ancillary health professions. Throughout this process, RSI provided logistical and other appropriate support to the Health Care Advisory Group, which greatly facilitated its work.

d. *Economic Development:* Geographically, the North Country is a vast region isolated from the major population centers. Economically, it is also much less developed than other parts of New York State. Its current per capita income is about 75% of the State's average, and its population density is about one-tenth the State's average. Economic development is a high priority for the region. Almost every local government in the region has programs designed to promote development.

The survey conducted by RSI indicated the strong need for developing a greater interaction and networking among various agencies engaged in economic development. Information sharing was identified as an important need. In the summer of 1993, RSI proposed the idea of having a regional economic development newsletter to bridge the communication gap to the North Country Alliance (NCA), a body composed of local and regional economic developers. The NCA liked the idea and agreed to partially fund the newsletter. Additional funds were provided by the Niagara-Mohawk Power Corporation, (a regional utility).

RSI has already published three issues of the *North Country Economic Development Newsletter* including one in May 1994. The *Newsletter* is published quarterly and features articles and items relating to regional economic development. It is distributed to over 850 individuals and offices interested in economic development in the North Country. The *Newsletter* has an Advisory Board (composed of area professional economic developers) which provides guidance with regard to its contents. The RSI director serves as managing editor. The initial response to the *Newsletter* has been positive. However, it is too early to make any final judgment on whether it has really succeeded in overcoming the communication gap.

In October 1993, RSI also published a booklet called, *Socio-Economic Profile of the North Country: Selected Economic and Social Indicators*. The booklet provides statistical information on the region's per capita income, population growth, poverty rate, employment data, etc. It is expected to be updated annually.

In addition, RSI provides technical and consultative service to organizations engaged in economic development. For example, RSI is currently assisting the St. Regis Mohawk Tribe's Economic Development Office in conducting a feasibility study for a shopping mall in that community. RSI also provided technical assistance to the Village of Potsdam for its application to New York State to be designated as an Economic Development Zone. Through such services as indicated above, RSI responds to the needs expressed by economic development agencies and, thus, plays a supporting role in addressing the economic needs of the region. RSI services to economic development organizations are financially self-supporting.

e. *Local Government:* Most rural regions in the United States are characterized by many small local governments. It is not uncommon to find a village with a population of less than 1000 having its own government. Among the rural communities, there is a strong tradition of self-reliance and of having freedom to manage its own affairs. The North Country is no exception to this phenomenon. St. Lawrence County (home of SUNY Potsdam), with a population of about 110,000, has 47 local governments. Thus, there is a high degree of fragmentation, duplication of efforts, and high cost in delivery of public services due to the small size of most governments. As a result, most local governments do not have adequate staff and budgetary resources to carry out their civic obligations.

Some of these problems and the need to deal with them were identified by local governments in the RSI survey. Most local governments indicated that they needed technical assistance in grant writing, planning, zoning, rural housing, transportation, tax structure, and community development. To meet these and other needs, RSI established a Local Government Issues Advisory Group composed of 12-13 representatives from village, town, and county governments as well as from the St. Regis Mohawk Tribe (Native Americans). The Group focused on the two counties of St. Lawrence and Franklin because it was believed that neither RSI nor the Group had enough resources to do a good job if there efforts extended much further. The Group is chaired by the Mayor of the Village of Potsdam. It sets its own agenda and priorities. RSI provides logistical and other appropriate support to facilitate the work of the Group.

After a careful review of the needs identified by various local governments, the Group believed that having an annual conference focusing on issues confronting the North Country, particularly St. Lawrence and Franklin Counties, would indeed be the best way to meet the needs of those working in local government. RSI conducted another survey seeking input from local governments on the idea of having an annual conference and the type of issues on which the conference should focus. Response to the survey was quite positive. The first conference was held in September, 1992. The theme of the conference was: New Approaches to Local Government and Community Development: Sensible Strategies for Tough Times. The conference included workshops on: "Real Property Tax", "Solid Waste Management: Grants in the Community Development Process", and "Consolidation and Cooperation". Again, response to this conference was extremely positive, and almost 92% of the participants asked for the continuation of the conferences.

The Group organized the second annual conference held in September, 1993. The theme of this conference was: *Doing More With Less: Challenges Facing Government, Business, and Community.* It included workshops on: "Effective Lobbying Techniques", "More Efficient Government Through Total Quality Management", and, "Public Infrastructure Improvement Money". The Group is currently planning the third annual conference in September, 1994. It can be safely said that these conferences would not have been held if RSI did not provide the needed support and took care of the arrangements for organizing them. These conferences are now seen as a forum not only for getting answers to the problems confronting local government officials, but also for networking and building partnerships. Both annual conferences were well attended.

In addition, RSI at SUNY Potsdam has been a regular site for receiving teleconferences on local government issues. These are made available to local government officials and to the general public at a nominal charge ($10). In 1993, six teleconferences were made available on such topics as, planning and zoning, rural housing, rural health care, consolidation. These teleconferences are produced by the New York State Office of Rural Affairs and broadcast throughout the State. Local arrangements for these teleconferences are made by RSI. RSI charges a registration fee and seeks contributions from local businesses to defray the costs connected with the annual conferences and teleconferences.

f. *Public Education Seminars:* RSI organizes seminars on topics of general interest to the public and these are open to them at no charge. In 1993, RSI held two seminars: "The ABCs of First-Time Home Buying" and "The ABCs of Managing Money". The first seminar was attended by 98 people and the second by 75. RSI is planning to hold two seminars in 1994. These seminars are sponsored and funded by the St. Lawrence County Bankers' Association.

g. *Computer Assistance:* This was one of the needs identified in the initial RSI survey. However, RSI has not, as yet, been able to meet this need because of the non-availability of appropriate staff to provide this assistance. RSI has attempted to meet this need on a selective basis by providing student interns majoring in Computer and Information Sciences at SUNY Potsdam. In 1993, RSI placed four students as interns. RSI is currently working with other organizations in the area to meet this need.

6. **Linking Teaching and Research with Public Service**: As mentioned, SUNY Potsdam regards public service as an important part of its educational mission. Therefore, it is important to ensure that the public service activities of the College are actually integrated into its teaching and scholarly functions. RSI has always been conscious of this institutional expectation. Below are examples of initiatives RSI has taken to develop and promote this linkage.

a. *The Walker Foundation North Country Research Fellowships:* The Fellowship Program is designed to encourage research on local and regional issues by faculty at the ten colleges and universities located in the North Country. In addition, the Program calls for having a co-investigator from the local community to ensure that research is relevant to the region. The Program is funded by the Walker Foundation. In 1994, six projects were funded: "Artificial Regeneration and Ecological Restoration of Black Ash", "Music in Our Lives: What Makes Opera? The H.M.S. Pinafore", "North Country Economic Indicators", "The Development of an Alcohol Awareness Program for Community-Dwelling North Country Older Persons", "Investigation of Suitable Additive for Improving the Properties of Massena Clay for the North Country Landfill Lining Systems", and, "An Empirical Study of Effective Boards of Directors and Performance of Local Development Corporations in Northern New York". Each project was awarded between $ 500 and $ 2,000 based on recommendations made by the Fellowships' Advisory Council. Projects were eligible for funding of up to $ 8,000.

The Walker Foundation North Country Fellowship Advisory Council composed of 17 members representing different constituencies in the North Country, reviews the applications and makes its recommendations to the President and Foundation for their final approval. The Advisory Council also recommends the amount of funding for each recommended project. The Program is administered by the RSI. It has been well received by the area educational institutions and community groups because it not only creates a greater interaction among them but also enables the faculty to utilize its expertise in providing solutions to problems confronting the region. Because of the positive response the Program generated in its first year, it has now been funded for two more years.

b. *SUNY Potsdam Faculty Research on North Country Program:* This Program is similar to the Walker Foundation Fellowship described above except that it is open only to the faculty at SUNY Potsdam. One to four research awards, usually ranging from $500 to $2000 are given each year. The RSI Steering Committee reviews applications and makes its recommendations (including the amount of funding for each project) to the President for final approval.

In 1993, the projects funded included: "Lead Analysis in Water", "The Furtherance of Local Court Justice in Rural Areas: North Country Perspective from St. Lawrence County", and "Seismicity and Shallow Subsurface Geophysical Studies". The projects funded in 1994 include:

"The New Economy at Akwesasne", "Innovative Marketing Network for St. Lawrence County Craftworkers", and "Assessing the Management Information Processing Training Needs in the North Country". The Program is funded by SUNY Potsdam's Office of Faculty Research and Grants. It is expected to continue in the future.

c. *Student Internships*. So far, placing students as interns with public and private organizations has been the only way of linking teaching and public service. RSI was able to place six students as interns in 1993 and 1994. In addition to getting academic credit for the internship, the students gain "real world" experience by working with the organizations. The organizations also benefit because they get needed help at no cost.

CONCLUSION

The Rural Services Institutes successfully tap the resources and expertise found at rural college and university campuses to provide a wide variety of services to rural governments, businesses, organizations and individuals. As the case study of the SUNY Potsdam RSI indicates, RSI can make a difference in the quality of life for rural communities. Many of the activities undertaken by Potsdam's RSI would not have happened otherwise. Rural communities are richer because they had RSI working **for** them and **with** them.

The RSIs operate as individual units to meet the unique needs of the communities in which they are located, and as a network to provide a collaborative approach to solving rural problems on a statewide level. The RSIs are designed to operate independently, with little cost to the State and with few bureaucratic constraints. Most of the services described in the case study are self-supporting. The RSI network is just one of the many approaches that can be taken to address rural issues and problems. RSI works by brining people together, to promote partnerships which benefits everyone.

[1] James A. Christenson and Cornelia B. Flora eds., "*A Rural Policy Agenda for the 1990s*," Rural Policies for the 1990s (Boulder, Colo.: Westview Press, 1992), 333.

[2] U.S. Department of Commerce, Bureau of Economic Analysis.

[3] N.Y. Executive Law Section 480 (Mckinney 1994)

[4] N.Y. Executive Law Section 480 (Mckinney 1994)

[5] N.Y. Education Law Section 351 (Mckinney 1994)

THE BINGARA COMMUNITY COMMON ISSUES — JOINT SOLUTIONS

S. J. Orr and E. Joshua — Australia

ABSTRACT

The project originated from a request to conduct workshops with the Rural Families Support Group in Bingara, North West New South Wales. The aim of the workshops was to highlight the issues facing group members and to assist the group decide on appropriate action to deal with the issues identified.

The first workshop involved issue identification and was conducted using the TOP Workshop method as described by Spencer (1989). This technique involves a number of stages, namely:

- introduction, background, and focus questions;
- identification of issues in small groups;
- listing all issues using file cards;
- placing like issues together;
- naming each collection of issues.

The workshop was conducted with twenty-four people and revealed the following issues and concerns:

- high unemployment within the community;
- lack of industry to generate income and provide employment opportunities within the community;
- reduced health and community care services;
- lack of public transport facilities;
- diminishing public funds;
- need for increased training and education opportunities;
- bleak outlook for agricultural production.

BACKGROUND

In September 1993 a number of women from Bingara in the North West of NSW participated with over 400 woman at 26 sites across NSW in the NSW Rural Women's Satellite Conference. This conference was part of a joint project with NSW Agriculture, NSW Technical and Further Education, NSW Department of Health and the NSW Board of Adult and Community Education. Funded by the Rural Access Program of the Commonwealth Department of Primary Industries and Energy the conference gave rural woman the opportunity to discuss issues affecting them and how these might be tackled.

The conference inspired many of the women at the various sites to form small groups to address local issues. The women at Bingara decided to form the 'Bingara Family Support Group' within their community. An outcome from their first meeting was the need to conduct two workshops. These workshops would aim to identify what issues the group needed to focus upon and what activities the group would undertake to deal with these issues.

PROCESS

The first workshop was held with twenty four people on the 29th of November. The focus, issue identification, was examined using the TOP workshop method as described by Spencer (1989).

At the beginning of the workshop, purpose, time frame, process and focus question were outlined. The focus question put to the group was "What are the major issues facing the community of Bingara?" The group was then split into teams of three to list four to five issues. Priority issues were written on file cards and stuck on the wall. The next step was to draw together all 'like' issues into columns. Each column was then given a name which was all encompassing. This session lasted two hours and at the end of it seven major themes had been identified.

The second workshop was held on the 7th of February 1994 and focused on specific actions to deal with the issues identified. The main difference between this and the first workshop was that the process aimed to give participants total ownership of the problem. The theme was — "What can you do to improve the situation?" The first step was to review the first workshop and add or delete any issues. Participants were then asked to align themselves with a particular issue, groups were formed around each issue. Some issues were not selected and therefore deleted. The next steps for the individual groups were to outline their focus issue, determine an action plan and lastly to give themselves a name. An operational structure for the overall group was formed.

WHAT WAS REVEALED

There were many issues raised in the initial workshop, the range highlighted the diversity of people in attendance. Issues raised by the focus question, "what are the major issues facing the community of Bingara", were:

- the need for improved disability services;
- the need for opportunities to establish profitable businesses;
- a discussion group;
- town and district unemployment;
- the lack of light industry;
- no money;
- return years 11 and 12 to Bingara, as long as it does not have an adverse impact upon other areas;
- lack of employment opportunities;
- lack of understanding as to what opportunities/activities exist;
- decrease in home and community care funding;
- poor communication of support services;
- taxes and other charges;
- cost of STD phone calls;
- survival of landholders;
- the need for combined community activities;
- lack of inter town public transport;
- availability of services in Bingara;
- lack of training for school leavers;
- youth unemployment;
- under age drinking.

From this list seven major themes emerged, no attempt was made to prioritise their importance.

1. Lack of employment opportunities.
2. Division of the public pie.
3. Less complication in communication.
4. Training for youth.
5. The poor state of the economy.
6. Lack of industry within the community.
7. Alcohol abuse in the community.

ACTIONS TO EMERGE

The first workshop concluded with all participants agreeing to come to the second workshop to finish the process and identify what actions should be taken to deal with the issues.

Four small groups formed at the second workshop. Each of these groups focused on a broad issue. The first task for the groups was to narrow the issue down into something which they could deal with. At the end of the workshop the four groups could be described as follows:

The Rural Survival Group — the focus of this group was on the survival of rural landholders. Their main actions were associated with the provision of information to landholders regarding government assistance measures.

The Beautification Committee — the aim of this group was to increase community self esteem by improving the aesthetic value of the town. The group wanted to make people feel proud to live in Bingara. Actions focused on looking into possibilities of tree and flower planting.

The Pathfinders — unemployment and the lack of light industry was the focus of this group. Their main actions were to investigate what opportunities existed for light industry. The industries of most interest were recycling and tourism.

The Pips — the main aim was to promote Bingara as the Orange town. This would provide potential tourist interest and also assist in the beautification of the town.

At the end of the workshop an organising committee for the overall group was established, this committee was made up of one member from each of the four sub groups. The aim of the next meeting was to report back on the progress which the smaller sub groups were making.

CONCLUSION

The exercise highlighted the opportunities for community empowerment through participation in decision making.

One of the key lessons learnt was the importance of reducing large and difficult issues into something relevant and achievable. While participants had agreed as to what the issues were this did not mean that they could or would do anything about them. The important part was to have them take ownership of the problem. This was done by making them come to a decision about what they could do to improve the situation. This involved both a change of thinking and redefining the issue.

The key component to the workshops was that the people wanted to bring about change within their community. The process provided the means to achieve this.

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Spencer, L. J. (1989). *'Winning Through Participation - Meeting the Challenge of Corporate Change with the Technology of Participation'*. Kendall / Hunt Publishing Company, Iowa.

A RURAL SUPPORT SERVICE IN SOUTHERN QUEENSLAND

Noel Park – Australia

The service described in this paper was operated by Lifeline Darling Downs and South West Queensland. Lifeline is part of an international network of telephonic and direct counselling services and the specific centre has a long involvement with the rural community.

The specific region covered by the Rural Support Service included in excess of 10,000 farm properties across the South Burnett, Darling Downs and Maranoa regions (bounded approximately by 149 degrees to 152 degrees East Longitude and 26 degrees to 28 degrees South Latitude). It was operative during the period October, 1991 to July, 1992.

The project was funded by the Queensland State Government as a pilot project in both rural support and government / non-government co-operation. It was designed to be part of an overall package of government response to the severe drought conditions affecting the area.

Specifically Lifeline was asked to undertake:

(a) An emergency Relief Package making one-off grants of up to $200 to primary producers from drought declared shires or properties. A summary of this part of the program is included in the appendices to this report.

(b) A farm visitation segment over a geographical area using such processes as Lifeline would define within the parameters of a written agreement with the Government.

STAFFING

Key selection criteria including maturity, rural background and well developed listening skills were considered to be more important than formal qualifications.

The co-ordinator had for the previous four months been providing counselling in Dalby three days per week. The four outreach workers, three men and a woman, brought experience in farming, rural banking and telephone counselling to the team, together with considerable life experience.

The oversight of the project rested in the hands of the Director of Lifeline Darling Downs & South West Queensland.

PRIORITIES / OBJECTIVES

The charter given to Lifeline's Rural Support Unit by the State Government was to conduct a six month project providing support for drought affected farm families.

Families in the worst drought affected areas were to be contacted to:

1. Learn how they were affected by the drought, listen to their concerns and convey this information to policy makers and others who may be able to make an appropriate response.
2. Provide them with accurate information on Government and other programmes that could be of help to them in the current circumstances.
3. Encourage the use of local networks and services, making referrals where necessary.
4. Provide immediate family support and counselling.

A longer term objective was to assist in the development of a response mechanism for any climatically induced crisis.

As an adjunct to the program, funds were made available to Lifeline Darling Downs to provide one-off payments of up to $200 to any drought affected primary producer. Information concerning these grants was made initially through DPI financial counsellors and subsequently through local networks and producer groups. In practice, all applicants requested the full $200.

LITERATURE

It was not the purpose of the project to delve deeply into the literature, nevertheless some pertinent reports were briefly reviewed.

DeVries (1963) described the family farm as a pyramid. The farm family comprise the tip. Technical, economic and social segments make up the three sides. A change in one segment cannot occur without affecting the others. All three must be strong, and evenly so, if balance is to be maintained and the family to remain securely on top.

Research in rural areas of the U.S. (Martinez, Bramby & Blundell, 1989) suggested that farm families preferred human service providers that were "Experienced . . . friendly . . . open minded and receptive to new approaches", would "tell it how it is", have "expertise on the issue . . . a sense of humour" and recognise the uniqueness of farming as a way of life.

They also identified major obstacles to the use of social services including concerns about families' reputations in the community, lack of understanding about what services do and how they work and the fact that farm families grow up with the idea of not reaching for help from social agencies.

The literature on stress management invariably indicates the importance of social support. Sarafino (1990) in his text on Health Psychology defined social support as "the perceived comfort, caring, esteem, or help a person receives from other people or groups" (P.107).

He suggested that there are four basic types:

1. Emotional support which provides comfort, reassurance and a sense of being loved.
2. Boosting of self-esteem through the expression of positive regard.
3. Direct assistance in the form of money, helping with chores and the like.
4. Information needed to make decisions, to assess the current situation or as feedback.

As many of those primary producers included in this project were facing forced foreclosure by financial institutions, attention was also given to the literature relating to the process of relocating farm families out of the rural sector. Park (1993) refers to the path to financial viability for farmers as "poorly supported and, like many country road signs, those that exist are often turned around to create confusion".

It is clear from previous studies that the largest roadblock on the path to decision making regarding relocation is lack of communication with farm families. Park et al (1990) highlighted the difficulty experienced by rural women in participating in decision making.

The necessity for effective communication within working and social groups is paramount. So it is somewhat disturbing to note that a current research project being undertaken by the University of Western Sydney (Gamble, Blunden, White and Easterling, 1992) found that in the important area of transferring the family farm, 42% of parents with married children at home on the farm had not talked to their spouse about plans for the eventual transfer, 63% had not spoken to their children about it and 84% had not included their daughter-in-law in discussions on the subject.

It is well recognised that there has been a marked deterioration in farmers terms of trade over the past 30 years or more. Nevertheless Black (1988) pointed out that academic and other reports describing the rural sector tend to come to widely differing conclusions and generally fail to appreciate the wide economic variation that exists.

Ginnivan and Lees (1991), in their study of families in transition from agriculture, pointed out that the transition may be complete, partial or gradual. They developed a model of the farm adjustment process which indicates the need (amongst other things) for education and counselling when trying to regain satisfactory farm performance and as a factor influencing the decision to sell up and leave. They found this an essential support service both during and post transition.

PROCESS

ADVERTISING

Initially the Queensland Grain Growers Assn., advertised the services of the Unit which greatly increased the number of inwards phone calls and brought the unit in contact with Government Departments such as the Department of Social Security.

Good co-operation was received from the media with frequent comment from the Director, and occasionally from team members, being disseminated. Local press, radio and especially 4QS Toowoomba, published activities of the team and the areas currently being targeted.

INDIVIDUAL CONTACTS

Individual farmers and farm families were the focus of the program. Discussions were held over the phone, at the Dalby Headquarters, at various community venues and especially in the farmers own homes. The majority of these latter discussions were the result of "cold calling".

A total of 1737 farm visits were made. On the 644 occasions when there was no one home a card was left. On 1093 occasions members of farm families were interviewed in their own homes.

TELEPHONE

Initially only one line was available, which proved something of a bottleneck as many calls were of considerable length. This was alleviated by an additional line and later the purchase of a mobile phone. The inclusion of a 008 number also made it possible for outreach workers to contact Headquarters from farmers homes, where necessary, as well as encouraging families to phone.

FARM VISITS

Prior to going to a particular district, contact was made with DPI and others to determine which area was more affected by drought or disadvantaged in some other way.

After selecting an area, we initially tried to contact as many farm families as possible, mostly cold calling and explaining our reasons for being there (which were readily accepted) and listening to discover the needs of the family. These proved to be many and varied.

OFF FARM

Mention has to be made of the Director of Nursing at the Wandoan Outpatients clinic who gave invaluable help by informing families in this area of the Project and making her expertise and the outpatients facilities available to us. She also helped with advice and follow-ups. Face to face contact with farmers off the farm was established in many districts but nowhere as frequently as at Wandoan.

During the project a small number of farmers were seen at the Dalby Headquarters and other venues.

NON PRIMARY PRODUCERS

Phone calls and personal calls to the office were received from non primary producers seeking advice on a wide range of matters. Some of the farm houses called on were occupied by non farm families renting the accommodation. Whilst hobby farmers were not targeted by the Unit, many were seen and their concerns discussed.

FORMAT OF INTERVIEWS

Each outreach worker had his / her own format. Some of the qualities employed were; the ability to listen and to remain non judgemental; development of empathy with farm families and discernment of their needs. Being on their home ground gave people the chance to discuss their problems in their own environment. This process proved to be successful in that they were able to discuss any matter they wanted to, after realising that the visitor had a genuine desire to understand their situation and encourage decision making. Some of the calls made were quite brief where it was perceived needs were not so great. However as the project developed, the average time lengthened and many were of two or more hours.

GROUP CONTACTS

While the main focus of the unit was to make farm visits, the opportunity was taken to speak with groups of farmers and others associated with the land.

SERVICE PROVIDERS / CARETAKERS

From the date the project started, contact was made with service providers and other caretakers in the area, to identify and put faces to existing services, discover the nature of their activities and inform them of our charter.

As each outreach worker joined the team, he / she visited a district within the area with the co-ordinator to achieve the above and get an overall view of the local situation. That person then maintained some contact with service providers in that area as appropriate and initiated new contacts. Many worthwhile leads came from these sources.

RESULTS

GENERAL OVERVIEW

After befriending the dogs and knocking on the door, the outreach worker would introduce him / herself and the purpose of the visit, which invited discussion of areas of concern arising from drought or recession.

Initial response varied from "We've really got no problems" – but talked for 2 hours, to "We've sure got some of those". Almost everyone was glad of the opportunity to unburden, expressing comments such as "I wish you had come sooner". Most farmers talked frankly of their financial and relationship problems.

Members of the team were obviously regarded as empathic and able to keep confidences. It had been expected that some may have shown resistance to the unsolicited visit, but in almost every case it was the visitor who terminated the interview, and some would obviously have talked all day. On many occasions there was an invitation to have a cuppa and sometimes to share a meal. The venue for discussion varied from the backyard to the living room - most often around the kitchen table, and on a few occasions performing chores such as penning up sheep and throwing fleeces on the skirting table whilst talking.

Wives were very willing to share their distress, and whilst men, on the whole, were slower to share, they, in the end, were just as open and sometimes in tears – "My God it's been good to have someone to talk to".

It was soon apparent that some families were coping very well and limited time was taken with these. These were generally well established and had good management skills. Those in most trouble had, usually, recently purchased more land or made a significant financial commitment to plant or carry out improvements.

Sometimes innovative, skilled management failed due to a succession of poor seasons or disastrous movement of commodity prices.

CONCLUSIONS AND RECOMMENDATIONS

It should be emphasised that the overall purpose of the project was to provide immediate support for the affected families. It was a service program, not a survey aimed at analysing the current situation. However during the process of bringing a personal service to over 1,000 families a good deal of pertinent information inevitably emerges.

The visitation program was unique in that no other agency or individual was able to door knock and "cold call" in this manner. It was the basic aim to listen to the farmers concerns, help them to understand the position they were in, expand their view of available options, describe the procedures to follow to access the systems, avoiding the pitfalls, and in many cases actually assist with form filling and appointment making. Some of these farm families were so devastated at the time that even the simplest of tasks were beyond them.

Basically nothing new was found. Droughts, natural disasters, industry downturns etc., have exposed the same problems before, but in this case farm families had someone call on them and sit down with them to let them talk things through. In many cases these were families who would not have, by themselves, sought such help.

Each outreach worker did find that farmers were very concerned about:-

(a) Their own future – long established farmers had lost hope in the industry, feeling that there was now little or no reward for a lifetime of toil.

(b) Their childrens' future – off farm opportunities appeared more attractive than taking over the family farm - if indeed finances allowed that option.

(c) The future for the total farming industry in Australia.

Some issues and findings have already been quantified but there are factors which make it impossible to quantify much of what has been accomplished. Some of these factors are:-

1. Confidentiality: Seeking help was often an embarrassment for the farmer, especially if it involved social security benefits, so if he said "thanks for your help, everything is

going OK now" on a follow-up phone call, it would often be left at that, assuming his problem had been overcome but not knowing exactly what had been achieved.

2 Final outcomes of assistance provided in many cases are not yet known eg some applications where help had been given by the unit are still being processed. Farmers not reached by the publicity campaigns or our visitation programme are still getting "word of mouth" information.

3 Also, this Unit was often only one of several influences involved in producing a successful result.

4 How do you measure basic family counselling? In this situation it was impossible.

Nevertheless there are some positive indicators that suggest that the aims as set out earlier were achieved.

Aim 1. Listen to concerns and learn how each individual was affected by the drought. Even if the initial response was one of suspicion, each member of the team was impressed by the overall acceptance and appreciation expressed for being on the farm and listening.

Aim 2. Provide accurate information of Government and other programs that could be of help. This was very important, as there is much lack of knowledge amongst the rural community. Some farmers did now know that farm financial counsellors were available or know their role. On many occasions farmers were advised to make use of this service and some of the counsellorshave advised that new clients have responded to this advice. However, many unfortunately have not and would require further encouragement to do so.

The outreach workers were often the "go-between", helping smooth the way with applications and delays. If the farmer was experiencing a problem which for one reason or another h/ she couldn't or wouldn't handle, the Unit had established contacts within organisations who responded promptly and most sympathetically.

Aim 3. Encouraging the use of local networks and services. This worked both ways. Some referrals were received from such agencies and their use was recommended where appropriate. Child care for mothers seeking Job Search Allowance was an example. Many of the leads followed for what was ostensible random calling came from local agencies, businesses, government departments and the "caring network" as well as friends and neighbours. A strong liaison network was being developed by the end of the project.

Aim 4. Basic counselling: Many phone calls have been received from people grateful for help received in obtaining J.S.A., F.A. F.A.S., Austudy, Age, Disability, and other pensions. These could under certain conditions be quantified, but what value do you put on calming the irate farmer, the encouragement given to the isolated farmer's wife who was having trouble feeding and clothing her children, the support given to the wife who wanted to apply for Job Search, but her partner was too proud to allow this – and countless more emotional crises? Our concern is not to quantify this unquantifiable support but to ask who is going to provide it now?

SOME SPECIFIC IMPLICATIONS FROM THE PROJECT

THE CHURCHES

It was not intended that this project would result in any assessment being made of the pastoral care being offered by churches throughout the area. However, it became clear that only a limited number of the congregations provided regular visitation to rural families.

For many of the families visited there was clear evidence that pastoral visits by either clergy or lay visitors could have eased the loneliness and frustration. On the other hand some church visitors were keen to express their own opinions on policies such as trade, tariffs, fiscal policy or party political issues and thereby nullified their effectiveness as a caring listener.

There is a real need for churches to hear the pain of their members and to represent the needs of families to governments and service delivery agencies.

BANKS AND FINANCIAL INSTITUTIONS

Financial policies and practices were frequently criticised by the farmers visited. Once again communication is a major problem because of the reluctance of many farmers to talk to their financiers about their difficulties. At the same time financial institutions are slow to explain to customers policies such as the application of penalty interest rates or the high cost of restructuring loans.

The responsibility for this poor communication must be shared by both the bankers and the farmers.

INITIATIVES SINCE THIS PROJECT

The restoration of some services to country areas and introduction in Queensland of Government agents in smaller communities has been a commendable approach. The creation of the role of Minister for Rural communities within the Queensland Cabinet has also been a positive step.

The project itself enhanced communications between Lifeline and both government agencies and producer organisations. It is important that the advantages of joint advocacy on behalf of growers over unilateral activity have been accepted.

Perhaps the most significant outcome from the project has been the decision by the Queensland Government in May, 1993 to apply the pilot scheme on a broader base. At that time, and subsequently, eight Rural Support Workers have been employed by community agencies throughout rural Queensland with funds from the Department of Family Services.

These workers, although working individually as opposed to the team engaged in the pilot project, are continuing the on-farm support found to be so vital by the Lifeline team.

The on-going liaison between Lifeline and other non-government agencies, producer groups and government departments has more effective discussion of the on-going needs of the rural community.

Adequate evidence exists that the project has had on-going benefits as well as the immediate benefits for the families who were involved.

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CONCEPTS OF RURALITY AND REMOTENESS: HOW IMPORTANT ARE THEY?

Kathleen B. Rousseaux — Australia

ABSTRACT

Social researchers, planners, policy writers and administrators persistently seek to distinguish between rural and urban populations. A social justice goal might be to address disparities between rural and urban populations on an educational indicator, such as completion of high school education. There is a persuasive pragmatic argument for the categorisation of populations on a rural/urban basis, particularly in the analysis of primary demographic and economic characteristics. But is a statistical definition of rural the most appropriate course? A dissenting view is that the social and economic problems existing in our society are related to aspatial processes, that is, not to location (rural or urban) but to the underlying economic and social structures.

For government providers responsible for the delivery of social services to rural Australia it is the impact of remoteness, rather than rurality per se, which is the chief consideration. Variations in accessibility, broadly attributable to the degree of remoteness of a location, assume great importance in the task of equitably distributing resources. It is argued that remoteness exists on a plane additional to rurality. Though the concepts are related, they are not interchangeable.

INTRODUCTION

The perspective adopted here is that of the public provider charged with the responsibility of delivering a social service in as equitable manner as possible. Variations in accessibility, attributable to the relative remoteness of a location, assume prime importance in the task of equitably distributing resources. The ambition of this paper is to make progress towards clarifying commonly used terms in rural education studies, in particular 'rurality' and 'remoteness'.[1]

But first, it is worthwhile to consider why so much effort is made to distinguish between rural and urban populations.

WHY DISTINGUISH BETWEEN URBAN AND RURAL?

Educational systems require basic demographic, financial and educational data about their schools and students. Statistics are essential grist for the education mill, enabling new facility planning, budgeting, rationalisation and allocation of material and human resources, and bids for national funding of educational and capital works programs, to name the most important. For the very practical purpose of keeping the education machine running, it is necessary to collect data of good quality which can be converted into meaningful statistics. A common breakdown of educational statistics is that based upon rural and urban categories.

What is behind this need to distinguish between rural and urban schools and students? More generally, why do social researchers, planners, administrators and politicians persistently seek to distinguish between rural and urban populations? Is it because of a deep-seated belief that economic and/or social conditions are fundamentally different for these groups of people? It has been suggested that the pre-eminence given to the rural/urban categorisation of census data variables is because of the commonly held assumption that 'there are fundamental differences between urban and rural populations and between the economic and social structures within which they live and work' (Hugo, 1987, p. 218).

So it is that the main purpose for comparative educational statistics is policy support. A policy goal might be to redress disparities in participation in post-compulsory education between urban and rural youth. Elements of national education policy, for example the efforts to raise rural secondary school retention rates to levels enjoyed by urban schools, are based on an assumption of rural deprivation, backed by education participation indicators. Invariably comparisons are made between rural and urban year 12 completion rates.

The relationship between participation in schooling and rural location is not as clear-cut as some would believe. National figures suggest that both gender and degree of remoteness are important contributing factors to early school leaving. The Australian Education Council's national statistics (AEC Statistical Annex, Table 11B, 1992) show that the group with the consistently lowest completion rate is males from remote areas (in 1991, 46%). For remote girls the 1991 completion rate was 58%. It is interesting that girls from rural regions (in this classification, rural is the balance after remote and metropolitan) had completion rates comparable to metropolitan girls (that is, 75% and 76% respectively).

Another study of socio-economic and regional variations in year 12 completion rates (Department of Employment, Education and Training, 1987) observed wide variations in educational participation between regions in non-metropolitan Australia, while on the other hand, it found that poor urban areas had lower completion rates than non-metropolitan regions. Little difference was found between girls in metropolitan and non-metropolitan regions, although the same did not apply for males (DEET, 1987, p. 24).

A comment is warranted here on the value of the metropolitan/non-metropolitan split. This breakdown is so crude as to be near useless, concealing more than it reveals. Its only use is to demonstrate in a statistical thumbnail sketch the characteristics which set the metropolitan population apart from the rest. The non-metropolitan category is a residual – the balance population after the major urban agglomerations greater than 100,000 population are accounted for. The urban hierarchy, from major regional centres to industrial towns to small country service centres, are concealed within this balance.[2] Reference to 'non-metropolitan' data cannot elucidate the demographic, economic or social conditions of rural Australians. However, there is an unfortunate tendency to equate non-metropolitan with rural (see for example the policy document *A Fair Go: The Federal Government's Strategy for Rural Education and Training* [Dawkins & Kerin, 1989]).

SOME PITFALLS OF THE RURAL/URBAN CATEGORISATION

The rural/urban categorisation of the population carries with it several pitfalls: first, commonly used statistical classifications are too coarse to capture the diversity of Australia's population; second, the essence of the condition called rurality cannot be read off according to geographical location; third, remoteness varies across rural locations and its effects are tempered by economic and social forces.

Simplistic classifications, whether dichotomous as above in metropolitan/non-metropolitan, or three-level such as metropolitan/rural/remote (Arundell, 1991) provided extremely summary statistics. Judgements must be made as to whether any differences represent significant disparities arising from some form of disadvantage. The statistics cannot tell us about causes. Rural/urban statistics are at best descriptive, and can suggest directions for action or further research.

It is unrealistic to assume that the condition of rurality can be identified by categorising the population according to place of residence. In his classic critique of the rural-urban continuum, Pahl (1966) said that 'we have some people who are in the city but are not of it (the urban villagers), whereas others are of the city but not in it (the mobile middle-class of the metropolitan commuter village)' (p. 307).

Demographers describe this contemporary trend as the rural-urban convergence (Hugo, 1987). Urban and rural life styles are closer than previously in history, evidenced by converging economic, social and demographic characteristics of urban and rural populations (Budge, Hugo & D'Rosario, 1992). The increased level of personal mobility has been instrumental to the deconcentration of the population (Hugo & Smailes, 1985), and subsequently to the process of rural-urban convergence. Urbanisation in its most general sense, including the influence of mass communications, has diminished the distinctions between rural and urban populations.

The way in which census data are published invites the user to make comparisons between urban and rural categories of population, and to draw conclusions about the relationship between geographical location and social characteristics (for example, highest level of education). There are inherent dangers in inferring causality based on location. The convergence of the rural and urban life style indicators (for example, fertility rates) warns of the dangers. It is regrettable that some researchers are enamoured with the notion that space possesses causal powers. This is perilously close to environmental determinism. In some hands, the seemingly innocuous term 'rural' can effortlessly attain some kind of causal status (Hoggart, 1990).

The political economy approach dismisses rurality as an explanatory variable, and urges that the human condition can be understood best by the critical analysis of differences in the distribution of wealth and power in society. Hoggart (1990) has gone so far as to advocate the abandonment of rural as an analytical category, with the suggestion that society would be better served if we concentrated on solving social problems stemming from underlying economic and social inequities. For example, by focusing on poverty and uneven access to employment. Cloke (1985) weighed into the debate referring to the claim that 'the criteria of poverty, immobility, powerlessness and arbitrary bureaucratic control are prevalent in all environments and need no rural-urban distinction' (p. 7). However, in a later analysis of Cloke (1989) observed that 'there is now a strong movement by some political-economic theorists to pull back from the ... overboard position that space is merely a social construct' (p. 174).

CLARIFYING CONCEPTS

To commence this part of the discussion, the ambiguous connotations of rurality are examined. Rurality and rural differ semantically, and while they are related concepts, they are not interchangeable terms. Secondly, it is argued here that rurality and remoteness need to be separated conceptually. Remoteness, and not rurality, poses the greater challenge to equitable service delivery. The financial and personal costs imposed by large distances and low population thresholds overshadow other aspects of service delivery. The concept of remoteness commands our attention, and bids separation from rurality and from rural alike. The connection between remoteness and accessibility is an important consideration.

Rurality

There are at least three different ways of conceptualising rurality: the socio-cultural, the social representational, and the descriptive.

Most profoundly, and most elusively too, rurality is part of the human condition -some might say a psycho-social state. This definition of rurality is generally referred to as the socio-cultural explanation. It is often accepted to mean the behavioural attributes of people living in rural areas (Hoggart, 1990). Rurality, in this sense, refers to the rural way of life, and the norms and values which govern behaviour. Traditionally this interpretation of rurality has interested the rural sociologist.

Another explanation is that rurality is a social representation (Halfacree, 1993). Largely through literature and the mass media, society has constructed a rurality relying on strong imagery and stereotypes. As a consequence it has created a rural myth (Bessant, 1978), which is agrarian (especially pastoral), exclusive (male dominated and non-aboriginal) and anti-urban.

But rurality is also taken to be statistical construction - derived from demographic and economic variables. This is referred to as the descriptive or ecological approach. The belief that there are characteristics which set rural people apart underlies efforts to classify the human populations on the basis of rural and urban categories. The existence of a rural statistical category offers the temptation of projecting 'rural' characteristics and behaviours onto the population classified on that basis. The problems associated with this have been discussed above.

To relieve the term of its ambiguity, it is suggested that rurality should refer only to the theoretical possibility of a discernible psycho-social condition which influences social organisation and behaviour shared by people living in rural locations. The educational service provider might be concerned with the effects of rurality in this sense. For example, the educational researcher investigating the causes of low educational and occupational aspirations among rural school students might hypothesise that the psycho-social condition of rurality may well offer an explanation.

Remoteness

Perhaps the chief concern of educational service delivery is with the concrete reality of rural location, rather than with an abstract notion of rurality. Two locational characteristics are of particular importance: distance and density. Large distances and low population densities impose high costs on the provision of social services in sparsely settled areas of the continent. For example, the financial costs and educational costs (related to, say, high teacher turnover) of staffing small, remote schools has been well documented (Queensland Department of Education, 1990).

Distance and population density are the most commonly used variables to define remoteness. For example, a population density threshold of 8 km2 per inhabitant has been suggested to define remote sparsely settled Australia (Holmes, 1987); an index of remoteness based on both distance and density measures is used to distinguish remote Statistical Local Areas (Arundell, 1991); and a service access measure incorporates distance, centre size and economic capacity (Griffith, 1992).

The terms rural and remote are sometimes used interchangeably. Excessive in the opposite direction is the tendency to treat rural and remote as mutually exclusive categories. This is cause for concern because neither is accurate, as is demonstrated below.

It can be said that while much of rural Australia is indeed remote, there are vast rural tracts within relatively easy reach of the major population concentrations. For most intents, the broadacre countryside beyond urban limits is rural in character. Just at what distance from areas of closer settlement remoteness sets in is a matter of conjecture.

To advance the point further, most remote places, but not all, are rural. There are remote *urban* places in Australia. Darwin is the prime example. Holmes (1988) illustrated the relativity of remoteness, by pointing out that in terms of the large distances separating the capital cities of Australia, they can be considered remote from one another, and certainly from other world cities.

Rural and remote are often defined separately to meet administrative needs of service agencies. It grates to behold the numerous studies which treat remote and rural as separate categories. Although the motives behind distinguishing remote areas for critical attention is admirable, to define rural as the residual balance between remote and metropolitan areas is to demean its importance.

It is perhaps instructive to separate the terms rural and remote as follows: essentially rural is descriptive, while remote is relative. Thus, within rural Australia there exist more remote and less remote places. Appreciating the relativity of remoteness within the context of rural Australia will advance our understanding of relative accessibility. And it is to this related concept that the discussion now turns.

Remoteness is related to, but not the same as, inaccessibility. This can be explained by considering a geographically remote area within which there are varying degrees of access to nominated services. For example, Mt Isa and Alice Springs are indisputably remote centres. However, the degree of access to services is quite different for the residents of these remote population centres compared to the residents of equally remote, but smaller, places such as Camooweal or Tennant Creek. The inter-relationships between distance, population size and capacity of the population to access services are summed up by the concept of accessibility. The measurement of relative accessibility to educational services in the Australian context has been considerably advanced by the efforts of Griffith (1992).

A recent investigation (AEC, 1993) drew a common response from educational administrators and program managers, and that was that accessibility to educational services was a key concern, related to *but not the same as rurality*. A recommendation of this report was that 'a statistically derived index of accessibility, rather than a geographical classification of rural/urban places, should be used to address issues related to resource allocation and/or targeting locationally disadvantaged students or school communities' (AEC, 1993, p. 47).

The expression 'locational disadvantage' has also arrived. From the sphere of academic geographical writings it has been seized by report writers as an expression which conveys in a more neutral manner than rural or remote, the penalty (disadvantage) of living distant from a given service. Nevertheless, it is not a synonym for either remoteness or rural. An individual who suffers a personal mobility problem may well be at a locational disadvantage vis-a-vis access to a service within an urban area. Thus, the term locational disadvantage is capable of conveying such subtleties with regard to accessibility.

CONCLUSION

The paper points to the lack of caution given to interpreting relatively coarse level educational statistics – particularly the tendency to read off social characteristics of population groups based upon rural and urban categories. One must consider the following questions: Is being remote from services more important than being categorised as rural? Or is it being poor, or Aboriginal, or all of the above, which resolves a person's fate? The political economy explanation of social disparities reproaches the emphasis on rural/urban categorisation of populations as being a wasted effort. This view maintains that the focus of our attention should be on solving intolerable social conditions (for example, those brought about by poverty, discrimination, alienation) regardless of location.

From the perspective of service delivery, it would appear that variations in geographical remoteness in rural Australia is the key issue. Remoteness restricts access to social services, or at least increases their costs. Therefore, the variability in access associated with remoteness is a concern to the provider and the client alike. To the extent that it alters accessibility, remoteness is an important concern of educational service providers.

Rurality in the socio-cultural sense may be important as well, rather more as providing an explanation for qualitative differences between student groupings. It is fanciful, however, to submit that rurality is a social characteristic that can be simply read off against geographical location *per se*.

The chief contribution of the political economists is that their critical analyses remind us of an alternative perspective, in which economics and social forces (for example, gender and racial bias) are extremely important.

Two points conclude this paper. First, the much-sought-after relationship (rural location = rurality = disadvantage) is not only simplistic, but also perilous in its capacity to distort. Second, there is evidence for those who seek it that the effects of remoteness are modulated by economic and social forces.

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FOOTNOTES:

1 In 1992-93, the author conducted an investigation for the Australian Education Council on the definition and classificiation of rural locations appropriate for the reporting of urban and rural comparative educational statistics. The resulting report, entitled *Rurality and Participation in Schooling* (AEC, 1993), was recently released. This investigation alerted the author to the readiness with which rural residence is equated with the rather elusive condition known as rurality. A need for clarification would seem in order.

2 The Australian Bureau of Statistics defines places of 1,000 to 99,999 population as urban centres (places of 100,000 or more are classified as major urban). Following the ABS definition, rural status is accorded to the inhabitants of small towns and villages (less than 1,000) and to the dispersed population.

3 Section of State categories are: major urban, other urban, rural locality and rural balance.

THINGS ARE CROOK IN THE BUSH: REPORT ON A NEEDS ANALYSIS SURVEY ON A SELECTED REGION THE CENTRAL WESTERN QUEENSLAND

J Seabrook — Australia

ACKNOWLEDGMENTS

The project which resulted in the report "Things are Crook in the Bush" was made possible by the contributors of the Central Western grazing community. We thank them for their responses and comments. We wish to acknowledge the significant role of Careforce, the ABC and the DPI, Longreach in instigating and supporting this project.

Our thanks go to the organisations who funded the Careforce Committee to design and produce the report These funds also allowed follow up to occur by providing graziers with relevant information Our thanks also to Julie Seabrook for compiling the data and producing the report

Respondents congratulated Careforce on their initiative to find out what the situation is really like, and for their care and concern in an environment perceived to be insensitive to their needs

EXECUTIVE SUMMARY

The rural downturn resulting from the drop in commodity prices and poor seasonal conditions raised concerns about how people were coping in the bush A survey of grazing properties in the Central West region showed just how crook things are

The survey identified that many were not getting by and that families are in a state of distress particularly regarding their future prospects Sources of income are precariously fragile for some, with approximately half eating into savings, overdrafts or living off Government support Many face looking for alternative sources of income off the property or leaving the land altogether

Independent of people's perceptions of their financial state they were not confident of the future and were requesting information on other forms of assistance to cope with contingencies Requests for assistance were of a practical or financial nature with very little interest shown in life issues

The level of assistance currently being received is minimal however requests for assistance were enough to warrant investigation into people's awareness and ability to access schemes, benefits and other packages of assistance People were not positive about dealing with agencies and felt that most of what was happening to them was beyond their control

Education of children was a concern, placing financial strain on property income Costs of transporting children to the school bus and costs associated with educating children away meant 11% were faced with the actual or threat of withdrawal of children from school Of grave concern to people was their ability to educate children on the property given their skills and time available to devote to school work Citing the possible escalation of this figure, maintenance of the highest education standards possible are an imperative

Perhaps the most revealing of all were the comments made by people about their situation and its effects on the family, the land and their stock The future for most looked bleak however there existed a reserve of hope that seasonal rains would bring enough relief to keep going Grazing families felt the future was unpredictable and that external conditions would dictate their future Graziers have seen their stock die and the quality of stock deteriorate below a saleable asset Those less drought affected felt relatively well off provided they had no debts and had reasonable equity in their property

In the interests of sustaining a viable grazing community, the Careforce Committee recommends that industry and agencies plan and implement action to address the current and potential future problems facing Central Western Queensland

SURVEY ORIGINS

During the current rural recession many welfare agencies and service clubs are raising funds to help those in need Current indications are that demand for welfare services will substantially increase over the coming months

In order to better plan activities and to more effectively cater for this demand the Longreach Careforce Committee undertook a survey of primary producers in the Central West to establish what these needs will be The committee consists of members of the community, local government, church, and support and welfare services

Funding for the project was provided by the following

Careforce

United Mine Workers Oaky Creek Lodge

Oaky Creek Coal Pty Ltd

Members of the Cathedral Parish of Rockhampton

Cathedral Parish Man's Society

Burgowan Collieries Pty Ltd

United Mine Workers German Creek Lodge

United Mine Workers Burgowan Lodge

Central Queensland Rural Aid Committee

Queensland Drought Relief Appeal

DF & LET Fysh "Acacia Downs" Aramac

SURVEY METHODOLOGY

On the 20th July 1993, a blanket survey was distributed to all rural properties via Australia Post offices and agencies throughout the region, addressed "To the Grazier" These were sent to the Shires of Alpha, Jericho, Aramac, Winton, Longreach, Ilfracombe, Isisford, Blackall, Tambo and Barcoo

The survey was designed with the advice and assistance of the Careforce committee and DPI and was inspected by a number of graziers that represented a sample of the population prior to being posted out (See Appendix I)

Of the 1050 surveys distributed, 223 were returned representing a 21% response The survey was able to

- identify the current needs
- identify issues of concern, and
- determine how the community perceives the future

The response by Shire and as a percentage of the number of surveys posted is shown in Table 1

TABLE I RESPONSE BY SHIRE

SHIRE	SURVEY %	RESPONSE NO'S	SURVEYS POSTED	TOTAL % RESPONSE BY POST
Jericho	19	43	120	36
Barcaldine	10	22	110	20
Longreach	19	43	180	24
Blackall	13	28	190	15
Tambo	7	16	60	27
Barcoo	4	8	30	27
Isisford	1	2	40	5
Ilfracombe	2	4	30	13
Aramac	13	30	80	38
Winton	12	27	210	13
TOTAL		223	(1050)1090	

Note 40 returns from the Post Office account for the difference in total

The response was extremely variable between shires with a range of 5 - 38 percent, with 3 shires responses totalling less than 15%

The response rate is indicative of the high level of concern in the bush about the future and its prospects, and reflects the need for people to have their say about what is happening to them and to their properties

The process of seeking the opinions of graziers, their families and employees would appear to be a legitimate picture of what is happening at a local level Outside forces or forces beyond their control are recognised as problems incapable of their attention, however what this survey does reflect is a picture of financial, family and on-property stress plus an indication of the future needs of the grazing community.

The report does not attempt to present the total picture of the grazing community or the full extent or ramifications of the drought affected population.

Due to the anonymous nature of the responses it is impossible to determine a profile of the respondents. Whether those most likely to respond to such a survey are in difficult circumstances or not would be pure speculation. There is therefore the possibility that the person who responded to the survey may not see a problem but there could be other members of the family with a different view.

(For further background information see Appendix 2 detailing demographics of the Central West region, major commodities, education and seasonal conditions.)

SURVEY ANALYSIS

This section of the report analyses the responses to survey questions and links basic categories and the comments respondents have made about their situation, to form a picture of the rural crisis in the Central West region.

FAMILIES ON PROPERTIES

The survey sample shows there is an average of 1.3 families per property with a range from 1 - 4 families living on property. The 223 responses represents 914 individuals and 284 families.

Table 4 charts the age range of children, youth and adults represented in this survey.

Table 2: Number each age group

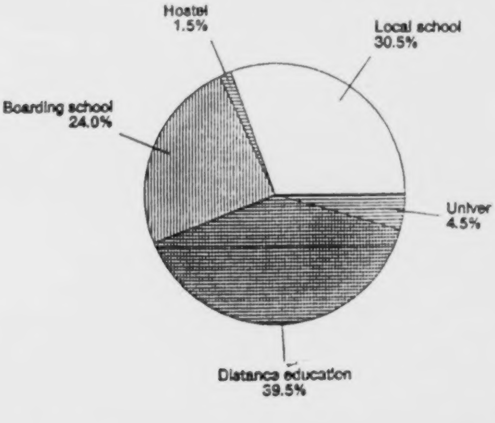
Age group	0 - 5	5-10	10 - 15	15 - 20	20 - 30	30 - 50	over 50
Numbers	117	98	70	44	128	278	179
% of total	13	11	8	5	14	30	19

It reveals that almost 50% of respondents are over 30 years of age. Pre-school and primary school age children constitute approximately a quarter of those on the survey properties. The declining proportion in the 10-15 and 5-20 year old bracket suggest absence at boarding school or university or seeking jobs outside the region.

EDUCATION

Approximately 200 (22%) individuals represented in the survey are school age children stressing the extent to which the current downturn could effect the education and future prospects of the area. Just over half (117 or 52%) of respondents have school age children on the property.

Diagram 1 reveals how school age children receive their education.



The majority of school age children are educated at or near home either at the local school or through the School of Distance Education (140 or 70%).

The number of children being educated at home through Distance Education (79 or 40%) reveals the potential level of stress placed on families facing drought conditions. The additional load of handfeeding stock and caring water erodes into time and attention paid to helping/supervising children with school work.

In addition the threat of, or actual withdrawal of children from boarding school (22 or 11%) and the transition to Distance Education schooling causes trepidation as to the time and ability of parents with an already full workload to educate their children at home.

A number of families face long distances and considerable expense to transport their children to the school bus (to take them to the local school). Up to 80 kms are travelled daily yet Government subsidy arrangements allow for only 3 km of travel. Of respondents with school age children 12% (24) requested financial assistance and 6% (12) practical assistance with their children's education. (See Forms of Assistance Diagram 3)

> This study has confirmed that during times of drought and rural downturn the cost of boarding school, costs of transport, the time to teach, and the skills for teaching children becomes a considerable burden.

There are links between this situation and the post compulsory training opportunities that will be available for these children in the region.

There is already a growing concern about the poor educational and skills profile of the population in the Central West. Treichel (1993) in his proposal for Community Centres of Continuing Education and Training says "A major factor inhibiting and stifling Central West Queensland's economic growth and development is the conspicuous absence of any social infrastructure to support the continuing education and training needs of its people.

Through a process of forced migration in the quest of higher agendas, the region has been denuded of its most valued potential resource — its youth! Rarely do those who venture eastward in search of educational opportunities return to contribute to their home region's economic and social development"

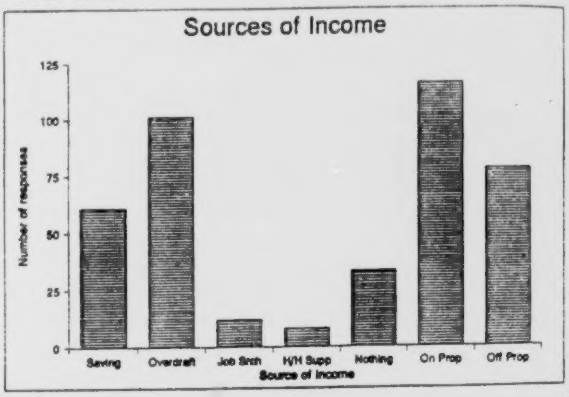
Participation in education opportunities remains the most significant barrier to further education according to Stejer (1993, Central West Remote Area Planning and Development Board). He questioned whether the regional population had the study skills and basic literacy levels to undertake further education.

The current downturn has the capacity to adversely affect the quality of the education of school children on properties. When combined with the capacity of the post compulsory training system in the region the issue becomes one of grave concern.

SOURCES OF INCOME

Diagram 2 shows independent totals for various sources of income and the respondents perception of their financial state.

DIAGRAM 2



61 respondents are drawing on savings and 101 are utilising overdrafts. A small number (12) are living off Job Search Allowance and 8 off Household Support. A total Of 78 earn income through off-property employment. Approximately half (116) of the respondents felt they were getting by on property income with a smaller number (33) saying their income was basically nothing.

Key points for further analysis are therefore:

- utilising savings/overdrafts
- use of Government support schemes
- off-property employment
- the high proportion of people getting by

UTILISING SAVINGS/OVERDRAFT

A high proportion (45% or 101) of respondents are living off overdraft facilities, several noting that they were approaching their limit. 27% or 61 are utilising savings or off farm investments to make ends meet. There was some overlap between these categories with 23 respondents (10%) utilising both avenues as sources of income. This means that a total of 138 respondents are using savings or overdraft or both.

Approximately 65% (144) of the respondents indicate that they are living off either savings, overdraft, Job Search Allowance, Household Support or any combination of these.

> The majority of respondents are clearly earning insufficient income from their property to at best maintain status quo.

USE OF GOVERNMENT SUPPORT SCHEMES

Only a small number of respondents are receiving government support. Eighteen (8%) people are receiving Job Search Allowance or Household Support or both.

> This may reflect either a lack of awareness of how these services can be accessed or a lack of need ad warrants further investigation.

OFF-PROPERTY EMPLOYMENT

There are seventy eight (78 or 35%) respondents earning an income off property. Comments indicate that if the rural downturn continues employment off property will become crucial to remaining viable.

> As the rural downturn continues, increased competition for jobs in town ad a greater demand on agencies providing employment will occur.

USE OF THREE AVENUES OF INCOME

165 or 74% of respondents are living off savings and investments or overdraft or have some income from off-property employment. A further three (3) respondents are in receipt of Job Search Allowance or Household Support as a sole income. This leaves 55 respondents who are reliant solely on current property income.

> This reveals a heavy dependence on income not immediately derived from the property business.

GETTING BY

In spite of this heavy dependence there is a level of optimism where people felt they were getting by. 116(52%) responses indicated that people felt they were getting by on property income. Indeed exactly half of these respondents (58) were utilising savings, investments or living off overdrafts. A further breakdown of this figure shows that 23 were living off savings, 26 off overdrafts and 8 off both savings and overdraft. Of the other half of this group of 116 who felt they were getting by on property income, twelve (12) had income from off-property employment. The remaining forty six (46) were reliant solely on current property income and felt they were getting by.

From the survey data a total of 55 respondents are reliant solely on current property income. It is worth noting that this leaves only 9 respondents in this category who feel they are not getting by.

> People's assessment of their ability to get by appears to be largely independent of source of income and may reflect their confidence in their ability to manage the current situation.

A small number of respondents (33 or 8%) felt their income was "basically nothing". Only ten percent of this group (3) indicated they were reliant solely on current property income.

On analysing the data it was clear that respondents had different interpretations of what was meant by "getting by on property income" or "income was basically nothing". Responses to these categories probably reflected their current attitude to the situation they were facing rather than an objective measure of income or wealth.

FORMS OF ASSISTANCE

The bush survival myth is alive and well in the Central West. Many people thought that others were more likely to be worse off than themselves, OR that they would "weather" the drought and "get by".

Of those requesting information on 35 Government and Agency assistance packages available:

- Approximately 46% of those people requesting further information on assistance felt they were "getting by".
- 54% of those who requested information did not feel they were "getting by".
- 52% of those people requesting further information on assistance felt they had basically no income. 48% felt they had some income.

This suggests that independent of the respondents perception of their current financial state they are not confident of the future and are requesting information on other forms of assistance to cope with contingencies.

Information on the Government/agency schemes, benefits, and other supports requested by respondent:

Farm Vehicle Concession	14
CAPELEC - Electricity Account Concessions	12
Land Rent Deferral	10
Drought Information and Fodder Register	8
Freight Subsidy Information	9
Drought Relief Queensland	7
Job Search Allowance	4
Drought Declaration Assistance	8
Business Advice for Rural Areas (BARA)	5
Farm Financial Counsellors	5
Drought Support Workers	4
Legal Aid	4
Farm Housing Support Scheme	2
Financial Social Support	2
Country Link' Social Security	2
QIDC - Rural Adjustment Scheme	3
Queensland Government Info Access Link (QDIAL)	1
Family Support Services	1
Lifeline	1
Ageline	1
Austudy	1
Assistance for Isolated Children	1
Queensland Housing Crisis Line	0
Crisis Care	0
Marriage Guidance	0

Women's Infolink	0
Domestic Violence	0
Kids Help Line	0
Crisis Care 24 hr/7 day counselling	0
Women's Health Centre	0
Red Cross	0
Centacare	0
Youth Info Line	0
Drought Management Officers	0

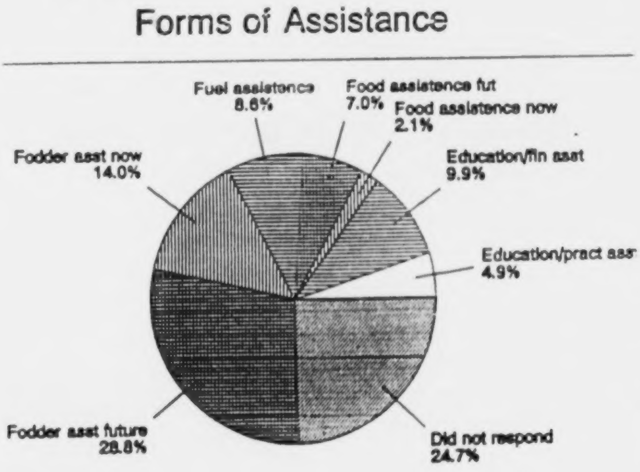
Note: These figures should not be interpreted as representing the needs of the total family on property

The greatest number of requests for information are for property or financial assistance available either through concessions, subsidies or benefits. A small number requested information on personal supports available which is surprising given the amount of stress evident in the comments accompanying the survey. This may be due to the community support systems maintained by "bush" people, but may also be due to the sense of hope lingering for the on coming season with the accompanying desire for back up security should physical support be required.

SPECIFIC TYPES OF ASSISTANCE

A breakdown of the forms of assistance relating to education, food, transport, fuel water and fodder requested by respondents is displayed in Diagram 3.

DIAGRAM 3



There were 183 requests for assistance either now or in the future. The utility of the specific forms of assistance are discussed below.

FOOD

Food donations are considered the least practical forms of assistance. "It makes you feel dreadful when you've been independent for so many years and then when people offer help one feels like we're taking and your pride feels like it's taken. Especially when one has been a willing giver to others over the years".

The idea of specific donation support is more difficult to accept as being too personal and demeaning to accept. Broad based support however, from government or cash donations from independent agencies is considered far more impersonal and therefore acceptable to many respondents.

As in the encapsulated quote above, the method of providing assistance is a complex issue. To understand this there needs to be a recognition of the enormous contribution made by "bush" people to the quality of life of their communities without the benefit of the enormous infrastructure of larger regional centres or cities. This traditional support of community comes at a personal and financial cost, substituting in effect the public/private agency role and domain.

This way of life of sustaining and maintaining the communities in which they live is anti thetical to accepting from others with the "shoe on the other foot".

There is an overwhelming uncertainty about the future, particularly in the next 18 months to two years which could see many people leave the land without future prospects.

Given this, people are unsure of their position in 6 months or 12 months time and while 2.1% (5) indicated they needed food assistance now, 7% (17) indicated they may need some food assistance in the foreseeable future.

TRANSPORT ASSISTANCE

23 or 10% of respondents with a disability or medical problem indicated they needed regular transport or other types of assistance. A number of these also required assistance for fuel.

21 or 8.6% requested assistance to purchase fuel for the following variety of reasons:

- pumping water
- carting water
- check watering points, fencing and stock
- carting fodder
- making stock feed
- feeding stock
- lighting plant
- school run
- attending education function
- medical treatment
- off property work
- domestic use

This form of assistance was seen as practical and helpful to off-set expenses for running the property and maintaining basic living standards.

WATER

At present 41% of properties (91) are carting water and 14% (32) will have to do so in the near future. Some have been carting water for 18 months.

The high number of respondents who commented on the relief that rain would bring to easing the burden on property and their current financial situation, depicts the significant contribution carting water makes to the pressure on income and sense of survival. The large numbers of stock that have perished indicate a reliance on water, or purchase of fuel to pump water, as an imperative to the recovery from the current situation suffered by many.

FODDER

Properties are hand feeding stock with either supplements or stock feed. Of the 99 or 44% of respondents hand feeding stock, 34 or 15% indicated they required fodder assistance now. More significant perhaps is that whether people indicated they were or were not currently hand feeding stock, 31% or approximately a third of total respondents (70) said they were likely to require fodder assistance in the near future. This charts the future uncertainty of seasonal conditions and reveals the primary source of need of people who wish to remain viable on property. This switches thought from feeling relatively OK about hand feeding stock at the moment, to a feeling of possible need in the future.

This leads to the conclusion that without significant rain the rural decline will deepen requiring some form of fodder and other assistance in the region.

The poignant comments made by property families reflect the human side of the rural downturn. It makes good sense to heed their word so that we and you, the policy makers can get it right by providing the right sort of assistance at the right time in the most appropriate way.

BANKS AND AGENTS

- We can survive if banks and agents get off our back. We are being penalised for destocking.
- (Banks) are only concerned with getting their money.
- (We) could about break even with 50% interest subsidy.
- We are battling along and managing now – if interest rates were to increase we will go under.
- We've been able to pay all bills by falling behind with payments to the Bank.
- If Government would stop cutting services and increasing charges, a lot more would be able to survive.
- Constant insecurity is caused by changes in Government policy.
- The Government hasn't given us any security to fight back.
- We have been very disappointed with the RAS.
- Have applied for JSA (Job Search Allowance) but as yet they have not made a decision. That was back in May.
- People who go into debt and look for alternative employment seem to be penalised when it comes to receiving assistance.
- Cannot obtain "farmers dole" — assets make us non-eligible.
- Farm household support should be a grant in extreme exceptional circumstances.
- I have found that when I have looked into the assistance available the red tape and time involved before you get anything is unbelievable. For job search allowance it took almost 4 months to be approved!!
- We need Government policy makers to come and see and listen to those who make their living out of the land, before we have change for changes sake.
- My concern is the tax that will hit me due to the forced sale of cattle because of dry conditions — I realise I can offset this over a few years but it still hits hard.
- Is there some help for graziers over 60 with assets but no income.
- There should be something done about getting businesses going through another party which is concerned about Australia's future.
- Where are the incentives to be productive.

DEBT LEVEL

- Debt level is almost at present property value (little equity) - all due to devastating interest rates.
- We have managed to pay off our debt when the wool prices were high, but have not amassed any savings and are about to reach the stage of requiring a loan/overdraft until the next wool cheque. If our income remains the same and prices rise, we will be put in this situation earlier each year.
- I believe we will have to sell out as the debt situation at the present moment is getting worse due to interest rates and low wool prices.
- We have used every resource from our family's funds to keep going.
- I have cashed a final super fund I had but this is finished as I used it for carry on funds.
- All available cash has been paid back into the property. The very year we'd planned to pay out our debt (the floor price fell) since then everything has been a nightmare. To maintain viability we've had to sell whatever assets to wait in hope for rain, a few good seasons to pull us out.
- Costs are all rising and our commodity prices aren't.

On a small property this rapidly erodes any margin of profit.

- If the drought continues into next year our position will become very serious as we will have a big reduction in income and will run out of equity next year.
- Combined farm and off farm money covers bank overdraft interest and fuel and electricity only.
- After this wool cheque we have no real income for at least the next 6 months.
- By doing some outside contracting to supplement my income I am able to survive the current situation.
- Cattle and off farm investments keep business trading.
- Family may soon have to live apart to obtain off property work.
- Feeding and agistment costs at present are being met by off farm investments.
- We will manage because we budget.
- At the moment we are getting by and managing to gradually pay off some bills that have been owing for some time.
- We are very fortunate to have a small second income

which is our bread and butter as we go further and further into debt.

- All unnecessary expenditure curtailed.
- We cut costs as far as possible and live off savings to a certain decided point. If the prospects have not improved we will leave the industry.

EFFECTS OF DROUGHT

- The drought has decimated our flock, we have done all we can to protect the land.
- (We have) no cattle to sell for income, they are too poor. Spending lots of money on fodder to keep them alive.
- The ongoing worry is not having saleable cattle to meet ($) commitments.
- Stock will die before water runs out.
- Both blocks, almost 50,000 acres are completely destocked apart from a handful of sheep and cattle I am undertaking to maintain.
- Approximately 7000 sheep destroyed.
- 4000 sheep destroyed.
- Have lost 4 000 sheep in drought since last shearing. Have all our cattle on agistment in NSW.
- Stock losses have been heavy and return to profitably will depend on wool prices and a couple of good seasons to rebuild stock numbers.
- 1993-1994 will be difficult as sheep and cattle have been forward sold because of failed seasons.
- We still have our sheep on the property but are on the road droving our cattle.
- Men are on the road droving cattle. I have been left on the place to check waters for remaining cattle.
- Cattle are on agistment and we are going to be unable to meet interest payments next year.
- Restocking sheep after drought breaks will be biggest problem to re-establish cash flow.

- So much maintenance work and renewal of plant not being done or happening.
- This is our fourth two year drought in ten years, this one being the worst dry period.
- The shearers are desperately worried about their jobs next year.
- The main issue is stress/management/mental health counselling.
- I pray to God every day to help our family and take away this drought, stress, family upheaval, worry, due to Bank repayment which CANNOT be met under the current wool, sheep, cattle, rural downturn. I just wish someone can help families like ours so we can pull through this.
- I feel everything is closing in and that we are slowly losing everything we have worked so hard for.
- High stress levels being experienced — zero leisure time.
- Constant pressure on the adults is reflected by the kids(poems, letters, statements).
- We have been in the industry for 30 years starting very small and slowly over the years getting together an economic enterprise. We are now back to a day to day future.

FODDER ASSISTANCE

- If there was government assistance over a broad base I would most likely apply for assistance.
- Any assistance is always a help but I think people in the bush tend to think there is always someone more needy than themselves and therefore decline a lot of assistance they could really use. This particularly relates to food aid and cash donations. I don't think less personal assistance such as fodder drops and interest subsidies would be declined.
- We are not eligible for any assistance.
- Restocking assistance will be valuable when the drought breaks.
- We may require fodder assistance if the drought continues.
- Recent rain has given relief from hand feeding and pumping but will not last more than two months.
- Fodder assistance is relative to when, if and how muchrain falls.
- we will be mustering soon and hay is too expensive to feed the weaners.
- Very much appreciate what assistance is being given by service clubs.
- I recently received hay from fodder train that passed through which was a godsend for our weaners. Have just received 170 points of rain which has put green shoots in the buffel and spinifex.
- There are a lot of genuine cases of need out there in the bush.

EDUCATION

- We drive 80 km a day to take our children to the schoolbus. Travel allowance is the same amount for travelling 3 km to bus as is 80 km.
- We may need some assistance to educate our three children if things don't improve in the coming years.
- We hope we won't need assistance but it is possible. So far we have always managed to pay fees, all be it in dribs and drabs.
- Our largest expense at the moment is education. With very low income, a relaxation of the assets test for Austudy would be of great benefit.
- Because of our isolation and distance from town, we receive financial assistance to send our child to boarding school. We hope this source of assistance (Govt) continues, if it were stopped we would have to bring our child home from school.
- I am unable to give my child undivided attention with her school work (School of Distance Education) as farm work demands attention.
- If it does not rain by September we don't see much future and our children will not be able to go to boarding school and I feel I am not able to teach high school well enough.
- I feel that children and their education are the innocent victims of this drought.

FUTURE OUTLOOK

- I don't see any future.
- Pretty bleak.
- Very unsure.
- It will be another tough year.
- Things are getting frightening and I fear the future doesn't hold a lot for us.
- Grim! For people looking toward retirement, shocking interest rates.
- The future is about as predictable as the weather.
- We'll all be relieved when it is all settled - one way or the other.
- I do not see any future for our children on the property or in the area.
- My husband does not encourage our son to seek a future on the property. We cannot see a viable future on the land.
- The future is scary - our effective working life is limited. We wonder should our kids go now and establish some other career or should they hang on in the hope that we don't lose all before we can recover enough to hand over to them. If it wasn't for the kids we would probably have sold out by now.
- 1994 will be a watershed for the wool industry and those dependent solely on it.
- No recovery in industry or Nation until wool prices rise well above cost of production.
- So long as interest rates don't rise dramatically and cattle prices don't crash we will continue to manage.
- We have put all our energy, time and resources into ourproperty. Bad prices make things difficult, we want to hold on - the threat of World Heritage Listing (of Lake Eyre Basin) hanging over our heads is too much to bear.
- Unless commodity prices increase and costs decrease it will be very difficult for this property to prosper.
- Long term - the wool industry will survive and prosper. Short term - no worthwhile rain in 93 will create a huge problem. Rain first then fix the commodity prices.
- We'll be alright if decent rains fall.
- Nothing that 6 inches of water won't fix to survive OK.
- With recent rains we will get by for several months.
- We have no idea what the future holds as our stock die and we have very little water.
- If it doesn't rain soon things will be very tight by the end of the year as our income and resources will be severely depleted.
- Please God let it rain soon.
- Our future will be decided by the seasons.
- If spring rains are not forthcoming, things could become precarious.
- At present we feel we can hold ground but if economic and seasonal conditions continue into 94 things will become extremely difficult. Even if both improve, the cost of restocking will still present problems.

- We require substantial summer rains and considerable improvement in wool prices for us to return to viability
- We feel that if given two good years of reasonable seasons and reasonable prices we will be able to stay on the land. Failing that we have little option but to go
- If things don't improve by this time next year we won't be here
- At the moment we are getting by. However by the way things are going, 6-12 months down the track could see us rolling our swags and putting roo in the stew
- I am a lucky one
- I've been through it before and probably will again, hopefully I'll manage to "hang in" through the bad times.
- Our area has been fortunate enough to get enough rain to keep our stocking rates at somewhere near normal. Although the situation has been getting tighter we should be OK
- We are very fortunate to have been less drought stricken than most and to have cash assets and stock and no debts
- Things will pick up in a couple of years
- As we have created jobs off farm we have been able to carry on, although we both have a very heavy workload. If either of our jobs cease we will leave the area
- We are confident things will improve - if we can hang on
- Things are pretty tough but we feel that others are worse off
- We are lucky not to have school age children and to be reasonably healthy. We can make it for a year or two yet, after that it is in the lap of the Gods

SUMMARY OF COMMENTS

BANKS AND AGENTS

People expressed hostility toward banks and felt that government policy changes contributed to the Worsening situation. Generally people were disappointed with Government assistance packages due to restrictions and anomalies in the eligibility criteria, plus the time taken to receive assistance.

DEBT LEVELS

Debt level is getting worse due to interest rates and low wool prices. To maintain properties people are eating into their savings and overdrafts. Many are bordering on becoming non viable or leaving the property altogether. Loss of on property income is forcing people to seek further off-farm income to service debts or maintain viability or to merely subsist. A number say they are getting by due to off-farm investments/income or through budgeting measures.

EFFECTS OF DROUGHT

The health of stock is declining due to drought conditions and significant losses have occurred. Saleability of cattle is poor and destocking on sheep properties is significant. A number are droving cattle or have stock on agistment. Return to profitability is dependent on an improvement in prices, the number of good seasons and the ability to restock. In some cases on property maintenance had ceased. High stress levels are experienced by all members of the family through constant pressure and concern for an unknown future.

FODDER ASSISTANCE

The need for assistance "is relative to when, if and how much rain falls". If assistance was available people would apply though at present many felt there were others worse off than themselves.

EDUCATION

The cost factor of educating children is significant and if the current situation did not improve then assistance to educate children would be sought. Although travel allowance is perceived as inadequate, other schemes are considered essential to maintaining children at school. There is uncertainty regarding parents ability to assist children with education at home should their children be withdrawn from school

FUTURE OUTLOOK

For the majority of people the future looks bleak and uncertain, yet for others there is hope. People do not feel there is a future for their children on the property. They feel the future is unpredictable and that external conditions will dictate their future either seasonally or through industry returns. Rain is considered the first priority followed by commodity prices to raising the prospects for the future. However if things do not improve a number said they will be "rolling their swags" and leaving the land. In less drought stricken areas optimism exists where people have assets, no debt and stock. A number say they could hang on for another two years in the faith that things will pick up in the short to medium term.

CONCLUSIONS AND RECOMMENDATIONS

1. No one agency bears the sole responsibility for addressing the issues of the rural downturn and its effects upon an industry and it's people. The provision of assistance is currently at a maximum but clearly is not providing the level of relief that is required, nor is it being accessed as evidenced by the number of requests for information on avenues of assistance.

   The low level of utilisation of Government schemes warrants further investigation to ascertain why they are not being accessed. Are people aware of what is available to them and do they know how to go about getting what they need?

   Agencies providing assistance need to be better co-ordinated and more proactive in advising grazing families of assistance opportunities and social service benefits available to them.

   Issue: Observing the balance between creating dependency on subsidies and schemes and assisting the industry to overcome the current downturn to ensure their return to viability.

   Issue: To apply both objective and subjective measurers to the current and future position of people in the industry.

2. Education costs are cited as a major expense for families who due to their isolation are required to send their children away to be educated or who need to travel long distances to the local school or who need to invest the time to supervise children at home.

   For government and non government agencies, as service providers and decision makers, to ensure it is "everybody's business" that the highest possible standards of education are maintained by monitoring children living on properties or away at school.

3. The evidence of stress and insecurity expressed in the comments identify the extent to which commodity prices and seasonal conditions effect the future prospects of the Central west grazing community.

   The economic and social ramifications of the current situation will create a watershed in the industry with severe implications on the shape and nature of this community and the region as a whole.

   For the community to resolve to take a pro active role in the regeaon process by contributing local knowledge to facilitate property build up to carry agricultural establishments into the future.

4. It is inevitable that the health and well being of people will continue to deteriorate without the means to fight back. The degree to which people can combat stress and strengthen the support systems will determine their ability to survive under difficult conditions.

   To provide grazing families with the tools and the skills to escape fatalistic mind sets by utilising the support and

welfare agency networks in the western and central region of Queensland.

5. Comments indicate that if the rural downturn continues, employment off property will become crucial to maintaining property viability. It will also be a consideration for people adjusting off the land as a way of staying in the region. This will place a great strain on the job providers and employment services in a market place that will be potentially looking for skilled workers.

To investigate the provision of services and infrastructure for further education and training to reskill people expected to come onto the job market.

6. Income levels are dangerously low in the region with many people living off negative incomes. Unfortunately this is an indication of a precarious financial position and understandably there is insecurity about the future.

To adopt a innovative approach to the handling ad treatment of debt by financial institutions and agencies with benefit schemes.

7. It is evident that if there is no significant rain in the near future, fodder assistance will be of vital importance to almost half the graziers who responded to the survey.

Preparation for fodder assistance to the region must get under way. Consultation with south west agencies involved in recent fodder drops may provide information on appropriate process, timing and methods of distribution.

IMPLEMENTATION

To combat the affects of the rural downturn in the Central West region the required efforts and resources must come from three groups. Firstly the graziers themselves to instigate change and work in partnership with agencies. Secondly, non government agencies who as support and service delivery bodies are the interface between policy makers and the community. Thirdly the government and planning bodies who manage response and change but who also influence the structural environment.

IMPLEMENTATION STRATEGY 1

The three parties establish a working group to develop an integrated approach to address the short and medium term issues and develop further the recommendations and implementation strategies contained within this report.

IMPLEMENTATION STRATEGY 2

An implementation plan be prepared in conjunction with industry, government and non government groups encompassing these and further recommendations:

Short term implementation strategies:

- access to information on assistance
- instigate local community property management and viability workshops
- monitor education standards of school age children at home or away at school
- provide counselling and advisory services
- investigate an innovative approach to debt

Medium term strategies:

- develop training and vocational education services in the region
- provide fodder assistance

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Appendix

1. Property Location (Nearest Town) ....
2. Number of families on property ....
3. Number in each age group
   0 to 5 .... 5 to 10 .... 10 to 15 .... 15 to 20
   20 to 30 .... 30 to 50 .... over 50
4. Present sources of income (tick each option)
   1) Living off savings or off farm investments .... Yes/No
   2) Living off overdraft .... Yes/No
   3) Job Search Allowance .... Yes/No
   4) Household support .... Yes/No
   5) Basically nothing .... Yes/No
   6) Getting by on property income .... Yes/No
   7) One or more family members working off-property ...... Yes/No
5. (a) Are there school aged children on the property? Yes/No (tick one)
   (b) If yes, how are they obtaining their education?(Give Numbers) ....
   1. Local school ....
   2. Staying in hostel to attend school in regional centre ....
   3. Boarding school ....
   4. School of Distance Education ....
6. Have you been obliged to withdraw children from school early, or changed method of education (eg. boarding school to Distance Ed.) for financial reasons? .... Yes/No (tick one)
7. (a) If No do you anticipate having to do so over the next 12 months? Yes/No (tick one)
   (b) If yes, would you be interested in obtaining assistance with your children's education?
   Financial Yes/No (tick one)
   Practical (Trained home tutor) Yes/No (Tick One)
8. (a) Do you require food assistance?
   Now Yes/No (Tick one)
   In the foreseeable future Yes/No (Tick one)
   (b) If yes when will this be required? .... (approx. month)
9. Possible transportation to property for food aid if required? (eg mail run) ....
10. Are there any people on the property with a disability or medical problem who need regular transportation or other assistance? Yes/No (Tick one)
11. (a) Do you require assistance to purchase fuel? Yes/No (Tick One)
    (b) If yes what will be used for? ....
12. (a) Are you presently carting or pumping water? Yes/No (Tick one

(b)If No, will you have to cart or pump water in the near future if worthwhile rains are not received? Yes/No (Tick one)

13 (a) Are you hand feeding stock? Yes/No (Tick one;

(b)If Yes, do you require fodder assistance? Yes/No (Tick one;

14 Are you likely to require fodder assistance in the near future? Yes/No (Tick one

15. Do you wish to add any comments on your present situation or what you believe the future holds for you ....

....

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

THE FOLLOWING ARE AVENUES OF ASSISTANCE WHICH ARE AVAILABLE.

1 Farm housing Support Scheme
2 Job Search Allowance
3 Financial Social Support
4 Drought Support Workers
5 Queensland Government Info Access Link (QDIAL) 6 Countrylink"Social Security
7 Family Support Services
8 Queensland Housing Crisis line
9 Crisis care
10 Lifeline
11 Marriage Guidance
12 Women's Infolink
13 Domestic Violence
14 Legal aid
15. Kids Help Line
16 Crisis Care 24 hr,7 day Counselling Service 17 Women's Health Centre
18. RedCross
19 Centrecare
20 Ageline
21. LegalAid
22 Youth Info line
23 Austudy
24 Assistance for isolated children
25. Capelec - Electricityy Account Concessions
26 Business advice for rural areas (BARA)
27. Farm Financial Counsellors
28. Drought Declaration Assistance
29 QIDC — Rural Adjustment Scheme
30 Land Rent Deferral
31 Farm vehicle concession
32. Drought Relief Queensland
33 Drought Info and fodder register
34 Drought Management Officers
35 Freight Subsidy Information

Would you like further information on any matter mentioned above? Yes/No (Tick one)

(a) If Yes what topic ....

(b) And/or would you like to a contacted regarding your present situation? Yes/No (Tick one)

If you answered yes to either (a) or (b), please fill out the details below

Name ....
Address ....
Phone ....
Signature ....

NOTE THIS INFORMATION IS STRICTLY CONFIDENTIAL

Please return completed questionnaire in the enclosed envelope by Friday, 6th August to:

The Chairman,
Careforce Committee,
Longreach Qld. 4730

APPENDIX 2

CENTRAL WEST REGION

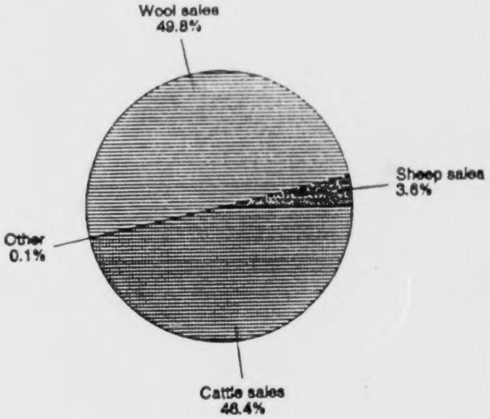
The Central West Region is characterised by it's reliance upon the grazing industry and its relative isolation from heavily populated centres.

The region selected for this survey is a area which is geographically huge and sparsely populated covering 214606 square kilometres with a resident population of 13732 people.

The two major commodities produced in the region are wool with 49.8% and beef with 46.4% of the total commodity production value (CW Stat Div.).

Value CW Primary Production Commodities

DIAGRAM 4



This reliance makes it particularly vulnerable to any downturn experienced in the industry, as at the current time. Liam Ryan (Central Queensland Regional Economic Development Strategy, UCQ 1993) notes this is a classic duel economy in terms of commodity production with an almost complete absence of value adding in the primary production sphere.

SHEEP AND CATTLE

TABLE 3 CW Demographics and Production

Shire	Area Sq Km	Resident Pop (a)	No. of prop.	Numbers ('000)[b] Sheep/Cattle		Gross $000 Prod[c] Wool/Beef	
Aramac	23232	1 082	90	673	58	13076	4686
Barcaldine	8430	1 821	59	459	29	7923	3782
Barooo	61 901	482	55	459	116	8729	19909
Blackall	16304	2 164	90	716	59	15789	8287
Ilfracombe	6566	318	36	426	5	8074	335
Isisford	10 528	373	37	448	20	6718	2217
Longreach	23 517	3 975	107	1143	63	22229	13 514

Tambo	10308	683	53	415	42	8939	6244
Winton	53 820	1 747	120	1 220	127	23580	18 156
Jericho	21717	1087	105	8	141	31	20366
GWQLD	236323	13732	752	5967	660	115088	97496
(% of Qld)	14%	0 5%	6%	34%	7%	32%	14%
Total Qld	1 727000	2676765	13482	17440	9 856	355 136	680999

[a] at 30 June 1987

[b] 1987/90

There are a total of 754 agricultural establishments in the Central West region operating 752 properties. Numbers of stock in the region total 5 967 000 sheep and 660000 cattle. Gross value of wool production is $115 million and beef disposals is $97 5 million.

DEBT LEVELS

PA Newman (1993) shows that average debt levels for producers with debt in July 1993 were $323 000 ($34 per dry sheep equivalent) with an equity rate of 75%. The downturn in wool prices which have fallen considerably since 1990 have had a subsequent impact on equity levels.

It is predicted that in 1993/94, significant cash losses will be experienced by large proportions of wool growers in western Queensland.

Strategies employed by producers since 1990 to help survive the wool market downturn were identified in Newmann (1993). These have included:

- Cost cutting (70%)
- Altering enterprise risk/other opportunities (50%)
- Off property work (30%)
- Liquidate reserves (5%)
- Expand (5%)

About 12% of producers had indicated that they would have to sell part or all of their property if things did not improve in the next couple of years.

He found that economies of scale were evident in that the economic performance and efficiency for larger holdings exceeded that for smaller holdings.

WOOL

L Ryan states that wool, produced predominantly for export contributes exports valued in excess of $3 billion for Australia. The CW region accounts for 34% of the total QLD production in 1990/91. Wool is the staple industry for some shires. For example of the total value of commodities produced, wool accounts for 93% in Ilfracombe, 70% in Aramac and 60% in Longreach Shire.

In the early 1990's the demand for wool was drastically reduced due to the international political and economical environment. This produced a dramatic increase in the wool stockpile. The floor price of wool was reduced from 870c/kg clean to 700c/kg and subsequently abolished allowing prices to drop to an all time low price of 428c/kg. The current commodity price is 440c/kg. Although prices have improved they are not expected to reach 1980's historically high levels.

Production of wool is forecast to continue falling until the mid 1990's due to the combined effects of sheep numbers and dry seasonal conditions. ABARE predicts production will stabilise in 1994-95 with a recovery to commence in 1997. It is predicted Queensland will experience a 17% fall in production in the 1992/93 season following on a 26% decline in 1991/92.

BEEF

The beef industry earned $2 4 million in Australian exports in 1990 and the domestic market accounts for 40% of production(L Ryan). Trends indicate that producers in Queensland are selling off their stock due to worsening seasonal conditions, however slow growth is expected over the medium term. Although meat processing currently takes place out side the region, potential opportunities have been identified for the establishment of small scale operations and the live sheep export trade from the Central West region.

RAINFALL

The region experiences enormous variation in rainfall from year to year and from place to place.

Winton's mean average rainfall is 410 mls with a standard deviation of 195 mls with an average of 39 days of rainfall. Extremes on a 100 year record range from 88 - 1086 mls. The total number of severe droughts equal 14 in 108 years from 1884 to 1991.

Longreach mean rainfall is 429 mls with a standard deviation of 196 with an average of 40 days of rainfall. Extremes on a 100 year record range from 109 to 1076 mls. The total number of severe droughts equal 16 in 100 years from 1893 to 1991. In the central west region property management must consider drought risk.

EDUCATION

The following is an extract from a study on select areas of the Mitchell Grass Downs regions in western Queensland by P. Newmann. It demonstrates education attainment and costs of education typical of the regions surveyed in the study.

Derived from information collected on the Longreach Mitchell Grass area, 94% of husbands were not educated beyond senior level or pastoral college while 53% did not complete senior studies.

For wives, 53% were not educated beyond senior level while 29% did not complete senior studies. 41% completed studies beyond senior while for husbands this was only 6%.

These figures highlight the low level of formal educational attainment for rural producers.

On average, 1.2 child was educated per property per year with 47% of the sample having to pay significant sums of money to educate their children away from the property.

The average estimated expense per property per year was $6389 while for properties with children it was $ 13577 per annum.

A SYSTEMS ANALYSIS OF THE RURAL POLICY BRANCH DPIE CANBERRA

Gary Wallace — Australia

ABSTRACT

Within the Rural Division of the Australian Department of Primary Industries and Energy a Rural Policy Branch exists to progress the Minister's initiatives in developing an integrated set of rural development policies. In this study a model of a learning organisation using a systems and futures based approach to policy making is used as a critical construct to examine the processes of policy development in the Rural Policy Branch. Initial results indicate the policy framework is based on a systemic model of internationally competitive industries, an official vision exists and the policy

framework is aimed at achieving this vision. Contrary to this is the almost non existence of evaluation mechanisms to determine the impact of programs nor a systemic and futures oriented research group aimed at evaluating policy initiatives before they are enacted. Both these deficiencies leave little opportunity for the assumptions and theories underpinning the policy framework to be critiqued nor therefore for the organisation to learn.

THE PROBLEM

Do we have the institutional arrangements (governance structures) appropriate to strategically managing the sustainable development of rural Australia?

Sustainable development issues in Australian rural societies are associated with a complex, dynamic and evolutionary web of events. These include cultural, political, ecological and economic transactions that transgress organisational, regional, state and international boundaries (see Epps and Sorensen 1993) Systemic approaches to policy research and development have emerged over the last half century that have the potential for dealing with this type of complexity. These policy approaches see the policy organisation as a learning system that utilise systemic and futures orientated thinking to aid in the development of policy frameworks.

In the Australian Rural Policy scene two initiatives have occurred at the Federal level pertinent to the above discussion. Developments of integrated policy initiatives to pursue rural community development has occurred within the Department of Primary Industry and Energy and within the Public Service Commission the strategic goal of becoming a "Learning Organisation" is advocated (Gunzburg D 1992 6).

Given the nature of the complexity of the issues the Rural Policy Branch is dealing with and the emergence of systemic approaches to policy research and development the purpose of this study is to undertake a critique of the policy development processes used in the branch from this new science approach to policy development.

METHODOLOGY

Soft systems methodology has been used in this project as

1. It allows the research to be contextualised through the process of rich picturing the situation to demonstrate the metaphorical "climate" of the situation being studied and
2. The flexibility of this critical systems methodology allows critical perspectives from outside the situation to be made relevant to the context under study.

Figure one is a diagrammatic representation of the process of soft systems methodology from Checkland (1981).

This methodology is a learning process where each step informs the preceding as well as the following step in a recursive manner. The whole approach may be cycled through a number of times before research questions are answered.

DATA COLLECTION AND ANALYSIS

The methods used in this study are based on gathering information about the structures and processes within the organisation, the products of the organisation and the dynamic nature of the environment that the organisation acts within. Two other concepts are used as guides within this exploration phase. The concept of culture, being the norms and values of behaviour and socially accepted paradigms informing practice, and the concept of politics as it affects the power underpinning decision making and decisions made. These analyses provide a picture of the social context in which the methodology is being used.

The sources of information about the context are observation, informal interviews and the use of secondary data. These findings are summarised in a series of rich pictures. These diagrammatic representations with accompanying text aim to identify the climate of the situation and allow for the critical perspective to be defined in a manner relevant to the situation.

THE RURAL POLICY BRANCH AND ITS ENVIRONMENT

The rural policy branch, the policy it oversees and the way it operates as a public organisation, are all products of a historical context. Since the Government Green Paper on agriculture in the 70's through the Balderstone report (Balderstone et al 1982)[4] and up until the late 1980's the emphasis of Federal primary industry policy has been largely focussed on a re-current incremental process of agricultural industry development and on single issue intermittent problem solving. See (Gerritsen and Murray 1987). Since the Mid 80's through to the present time issues in rural Australia have compounded with cycles of drought, land degradation, escalating interest rates, depressed or collapsed commodity prices and an impact on the social fabric of rural communities.

In 1992 the Rural Division of the DPIE Canberra was created with a charter to manage the Rural Adjustment Scheme (DPIE 1992)[6] - a program aimed at providing a safety net for uneconomic farm businesses to either restructure to a more viable entity or to assist farmers to get out of farming. Within this Division a Rural Policy Branch was formed to act as a think-tank and secretariat for overseeing and bringing to fruition new policy initiatives associated with National Drought policy, National Food policy and changes to RAS. Budgetary constraints plus recent initiatives within the branch have pushed the federal and state agendas' to pursue a more holistic and integrated approach to rural policy.

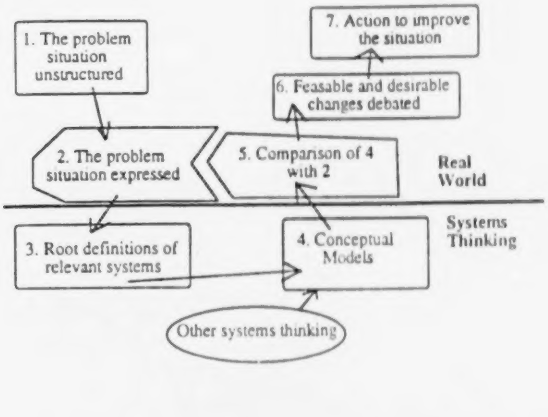

1. The problem situation unstructured
7. Action to improve the situation
6. Feasable and desirable changes debated
2. The problem situation expressed
5. Comparison of 4 with 2
Real World
Systems Thinking
3. Root definitions of relevant systems
4. Conceptual Models
Other systems thinking

Figure 1 The process of soft systems methodology

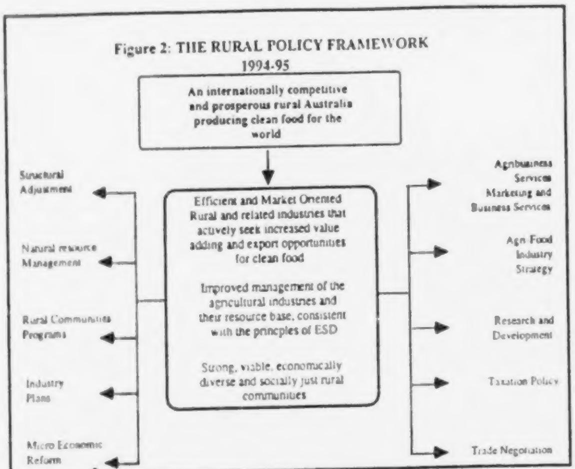


Figure 2: THE RURAL POLICY FRAMEWORK 1994-95
An internationally competitive and prosperous rural Australia producing clean food for the world
Efficient and Market Oriented Rural and related industries that actively seek increased value adding and export opportunities for clean food
Improved management of the agricultural industries and their resource base, consistent with the principles of ESD
Strong, viable, economically diverse and socially just rural communities
Structural Adjustment
Natural resource Management
Rural Communities Programs
Industry Plans
Micro Economic Reform
Agribusiness Services Marketing and Business Services
Agri Food Industry Strategy
Research and Development
Taxation Policy
Trade Negotiation

This not only involved pursuing economic development and structural adjustment initiatives but also encompassed ecologically sustainable development and social justice initiatives wound into an integrated package. The total package of rural development policies is presented in figure two the Rural Policy Framework 1994 - 95. For more detail on the specifics of these policies see Kingma O. and Grant G 1993 also Newton A 1993[3]

While these policy changes where going on administrative policy changes also occurred included a freeing up of administrative process Codd 1991[4] and Human Resource Management policies that are looking to move the Public Service to becoming a Learning Organisation (Gunzburg 1992)[5]

"Change is endemic" in the public service. One senior bureaucrat claims that his department has become inured to change both in an administrative framework and in actual policies and programs. "I suspect we have become change junkies who would have very unpleasant withdrawal symptoms if we did not have regular shots of change" (Volker D 1992)

Change is especially true in the Rural Division and its immediate environment. See figure three. There have been changes in Ministers, in the Department Secretary and in division secretaries. Change has also been endemic structurally with the names and functions of the agricultural council and the standing committe of agriculture changing to incorporate closer economic relations with New Zealand and to cover resource management issues in primary Industries

The division and branches are structurally dynamic in nature and subject to the directives of Ministers and senior executives. In the twelve months that this study was undertaken the Rural Branch has gone from being a policy think tank with the role of dealing with policy issues to a program administration branch with the task of bedding down the strategies into actual programs and dealing with problems of implementation as they arise.

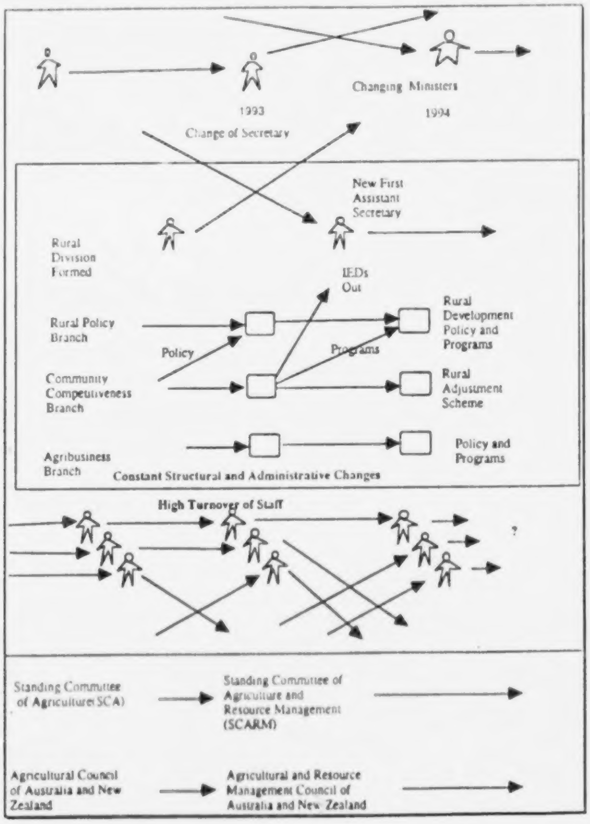

Changing Ministers
1993
1994
Change of Secretary
New First Assistant Secretary
Rural Division Formed
IEDs Out
Rural Policy Branch
Policy
Programs
Rural Development Policy and Programs
Community Competitiveness Branch
Rural Adjustment Scheme
Agribusiness Branch
Policy and Programs
Constant Structural and Administrative Changes
High Turnover of Staff
?
Standing Committee of Agriculture(SCA)
Standing Committee of Agriculture and Resource Management (SCARM)
Agricultural Council of Australia and New Zealand
Agricultural and Resource Management Council of Australia and New Zealand

FIGURE 3 The Dynamic nature of the Rural Division and its environment.

Personnel with the branches are made up of a mix of graduate trainees, contract appointments and permanent. The roles played by members of the branch include briefing ministers and senate committees, co-ordinating research and secretarial activities, responding to letters to the Minister, chairing or membership of working parties and committees, networking across the nation, writing, reviewing and editing reports, directing policy developments, briefing and debriefing staff. As an outcome of these activities senior staff are under much pressure to perform with very little time for research and reflection

Structural change within the public service had led to a devolution of power over resource management. This freedom has been partially restrained by a 20% cut in budget and a tightening of administrative freedoms by the new Secretary of the Department.

Within this organisational context a high level of integration of policies appears to be evolving by increments as a result of an evolving umbrella of systemic thinking. That is, looking for the connections and staying in touch with the big picture plays a big part in the evolution of policy ideas. Synergy of policies is a word bandied about often with the aim being to balance the tensions between Social Justice and the Free Market while recognising ESD requirements. Free market economics is the dominant paradigm underpinning the pursuit of efficient resource management and internationally competitive industries. Even so there appears to be a real concern about the welfare of farming communities and environmental degradation that comes through in many statements about policies and their goals.

> (We are looking for) ways forward that are socially just, economically viable and ecologically sustainable. Signs around the edge that things need to change."
>
> "Issues the branch is dealing with include Assets testing, Taxation issues, Education and training, Community services, Feral animals, Mabo, Farm investment, Farm Finance".
>
> "Problems are, dis-investment, not maintaining capital stock, depreciating of equity, declining asset values and not maintaining capital investment."
>
> "working on issues associated with equity for example access to education services etc."
>
> "Future of Agriculture is not just a commodity focus - economic and social status will depend on non farm business to support (farmers)"

In dealing with the states consideration for keeping the initiative and leading the states, determines what goes public. In this context Federal officers through SCARM, with the secretarial aid of the Branch, are moving towards facilitating a co-ordination of policy and programs across states and between state agencies. Rural development issues are difficult for all parties as this is not the traditional role of Departments of Agriculture

"Ag. and Resource Management Ministers and their Departments and Agencies need to be involved in these broader issues. Need to work hard. There are tensions within the agencies. People who believe in change against old school agriculture production agencies who believe they should not be involved."

Developments of policy initiatives are also restricted because many aspects of rural development are outside the brief of the Ministry for Primary Industries and Energy and its Department.

DEFINING A CRITICAL PERSPECTIVE

The primary task of the rural policy branch is to be a forward looking think tank that provides secretariat services and decision support mechanisms to the Minister, the Department Secretary and other policy institutions like SCARM, senate committees and advisory councils. One purpose of the branch is to pursue the integration of the policy framework into a systemic whole. In naming a relevant system I have incorporated concepts of systemic and futures thinking as underpinning decision support. The system is

> A systems and futures oriented learning system for providing decision support to the Minister on issues affecting the facilitation of sustainable rural development in Australia.

CONCEPTUALISING A SYSTEMIC AND FUTURES ORIENTATED LEARNING SYSTEM

In the field of public administration and policy development, policies have traditionally been developed using a rational process to pursue optimal solutions for single issue problems (Dror 1993)[11]. This approach to policy and its development is under question especially in relation to policy outcomes for addressing complex socio economic and ecological issues in contemporary society. Recent research initiatives have included hard systems approaches using multi criteria decision support systems (Bogetoft and Pruzan 1991)[12] Systems Dynamics (Forrester J. W. 1992)[13] and more recently systems based approaches to policy making (De Greene 1993). Emerging with this new science of policy making is the interdisciplinary practices of futurology (see Swartz 1990, Milbrath 1989, Garrett 1993[14]). Futurology is about constructing a set of scenarios for the future based on history and known trends in Politics, Technology, Culture, Economy and the Environment. These approaches are being espoused as appropriate for dealing with the complex issues that governments and policy makers are faced with today.

In the context of seeing policy as the products of an organisation are Ventris and Luke's 1988[15] learning organisations for policy development and Daneke's 1990[16] administrative science. These writers posit that the policy process must be seen in the context of the organisation as a learning entity while Daneke goes further by proposing an advanced systems theory that aims to use a systems paradigm to unify critical theories of social construction, naturalistic methodologies and the hard positivist paradigm of neoclassic economics.

The process of learning for policy development that Ventris and Luke 1988 propose is one of problem posing rather than problem solving, developing new approaches and evaluating the outcomes. Policy formulation and implementation then are based on a circular model of research or learning. They see this substantive learning as

> "a normative process of personal learning that involves a critical reflection and subsequent re-formulation of organisational goals and policy choices as well as the development of new processes for choosing appropriate policy initiatives" (Ventris and Luke 1988: 349).

Developing new approaches, they claim implies an active role of the citizenry not only as a means to check bias and misrepresentation but also a way to determine the unique needs of differing publics. Policy choices are viewed here as experimental and not as ultimate solutions (Ventris and Luke 1988:351). Reformulating theories of action become a reciprocal learning process between public and administrator. This then is a learning loop for debate on the formulation of policies and exposes public servants to critical debate. The evaluation process refers to how effectively policies are achieving their desired ends in an interconnected political environment with citizens becoming directly involved in the critique of theories in use. This implies that public administrators become "an open self critical community of inquiry" (Bernstein, 1978:198)[17].

The heart of a learning organisation though is the openning up and critiquing of the mental models that underpin an organisations strategies and actions "Mental models are deeply ingrained assumptions, generalisations or even pictures and images that influence how we understand the world and how we take action. In organisations such mental models control what people perceive can or cannot be done. Change rarely takes place until management teams change their shared mental models." Senge 1992[18]

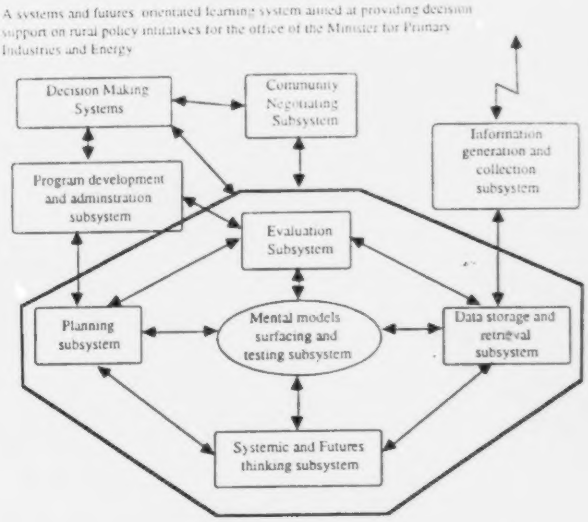
In 1989 Lester Milbrath put forward a policy model that included many of the components discussed above (Milbrath 1989:282). The essence of Milbrath's learning governance structure is that the system should have four basic elements: an information system, a systemic and futures thinking capability, a decision making and intervention capability and an impact evaluation system. These other authors above have identified additional activities appropriate to a futures and systems orientated learning organisation. They include a process of exposing and evaluating the mental models or theories that underpin the policy framework and the policy organisation becomes involved in critical debate with the community over these constructs as well as the policy frameworks themselves. Figure four is a conceptual model of a systems and futures oriented learning system envisaged as an appropriate policy process for dealing with complexity and change.

COMPARATIVE ANALYSIS

The aim behind the comparison stage is to generate debate about the perspective used and the implications for further study of the organisation. The process used here is to ask the questions "does this activity exist " and "how well is it done?" Models of the parts of reality similar to the model have been constructed with a view to mapping between the two which might highlight some significant differences worthy of discussion (Flood and Jackson 1991: 177)[19]

FINDINGS

Information generation and collection activities



A systems and futures orientated learning system aimed at providing decision support on rural policy initiatives for the office of the Minister for Primary Industries and Energy

Decision Making Systems
Community Negotiating Subsystem
Information generation and collection subsystem
Program development and adminstration subsystem
Evaluation Subsystem
Planning subsystem
Mental models surfacing and testing subsystem
Data storage and retrieval subsystem
Systemic and Futures thinking subsystem

FIGURE 4: A Soft Systems Model Used to Critique the Rural Policy Branch Policy Development Process.

This is not a clear ongoing or specific function of the policy unit. Broad research is undertaken by the Australian Bureau of Agriculture and Resource Economics (ABARE) and the Bureau of Rural Science (BRS). In addition, some external consultancies are commissioned by the branch to aid in the decision making process. Australian Bureau of Statistics (ABS) data is also accessed with the Policy Unit involved in negotiation over some aspects of data collected. The mass media monitored for information with the Land being a primary source of information about the rural community and rural industries. The structural adjustment and industry development agendas of the Policy unit have an influence on the research agenda of RIRDC.

DATA BASE MANAGEMENT SYSTEM

At the time of study the database management systems where overhauled to reduce fragmentation of record keeping systems and centralise work in progress on a common computer network server.

The Rural Division is funding the ABS to develop a user friendly computer interface to access Agriculture Census and other relevant statistics. Called Geolink this database has only recently been commissioned. ABARE have also produced a user friendly database program called Aspire. This provides time series statistics from ABARE surveys. Libraries abound in Canberra but staff has little or no time for research.

In terms of staff knowledge and experiences as a soft form of data base, turnover of staff creates problems with loss of knowledge about the background of policy developments. This may result in an inconsistent line of thinking and does not lead to the development of an effective learning organisation (Argyris and Schon 1978)[20] where experience may not be carried forward into new initiatives and knowledge relevant to the maintenance and development of programs may be lost with each new departure.

SYSTEMS / FUTURES THINKING

Scenario development in the sense outlined by Swartz 1990 and Garret[21] is not undertaken within this department.

Work undertaken by Walmsley and Sorensen 1993[22] and their colleagues at the University of New England is unknown in the Branch while futures work undertaken by the commission for the future is perceived to be to far out to be relevant to the issues being dealt with by the Department.

Systems research employing the theories and practices of Systems Dynamics see (Forrester 1993) or the use of Microworlds[23] (Senge and Lannon, 1990) to explore the impact of policy strategies on either the broader community or the organisation does not occur. The modelling that does occur happens in the Australian Bureau of Agricultural and resource economics. These models are built on econometric theories of reality that are based on the assumptions that the world moves to a state equilibrium, people make rational decisions and that group outcomes are predictable and occur in a linear fashion.

PLANNING (POLICY DEVELOPMENT)

Figure five is a graphic representation of the process of policy development within the Rural Policy Branch. The way it is represented here suggests the organisation is reactive to pressure from external forces. These pressures are responded to in three ways. The first involves quick brainstorming responses. The second, taking a longer period of contemplation to understand all the issues and come up with an integrated response. The third, requiring a longer run of research that could involve any number of methods including paid research consultancies. This might also involve Ministerial task forces and internal research officers undertaking a review of policies that are within the jurisdiction of other Federal departments.

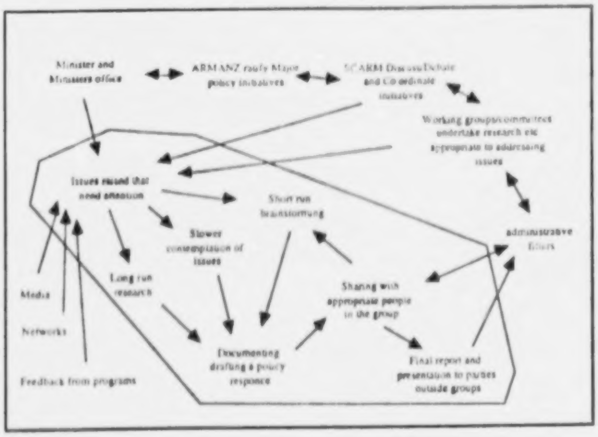

Minister and Ministers office
ARMANZ ratify Major policy initiatives
SCARM Discuss/Debate and Co ordinate initiatives
Working groups/committees undertake research etc appropriate to addressing issues
Issues raised that need attention
Short run brainstorming
Slower contemplation of issues
Long run research
administrative filters
Sharing with appropriate people in the group
Media
Networks
Feedback from programs
Documenting drafting a policy response
Final report and presentation to parties outside groups

Figure 5: The process of policy development.

"Flying by the seat of the pants" is how one officer described the process of policy and program development.

DECISION MAKING

Decision making is hard to identify within the policy process because so many are made outside the Branch. Decisions occur within the Cabinet and Ministers Office and are subject to the party philosophies, the beliefs of the Minister and ultimately the Prime Minister. Cabinet decides on major policy initiatives and how much money the Department can have. The Minister decides what major policy changes to progress to Cabinet and initiatives to be explored by Dept. officers.

Many decisions are also made in advisory councils and working groups outside the Department.

Within the Department Secretaries decide who will do what and when as well as giving direction to policy initiatives and the implementation of programs. Secretaries also decide what to progress to the Ministers office.

MENTAL MODEL EVALUATION/CRITIQUE

A vision offered by Geoff Miller in January 1992 outlines potential future developments in Australian Agriculture[24], and this vision is was further enhanced by a number of industry participants in 1993 (Gleeson T., 1993)[25] This model of the future development of Australian industry was based on a normative model of how Internationally competitive industries work (Porter M 1990) see figure six The model assumes industry development needs to be treated systemically and that policies in many areas need to be seen as interdependant.

Porter hypothesisd that a countries wealth and industry sustainability is a product of that industry's or country's competitive advantage. Competitive advantage is a product of

- the ability of a country and its industries to support the factor conditions of community infrastructure and create advanced factor conditions, eg highly educated and informed individuals, innovative research and development initiatives, efficient transport and communications networks.
- Firms have strategies that allow use of these advance factor conditions to produce products that meet demand conditions both on the domestic and the international markets and that the products are competitive in price, quality and novelty. To be competitive on the international market the product must be competitive on an open domestic market.
- Vertical and horizontal integration of industries creates conditions favourable to efficiency of production and quality assurance.
- That a synergy exists between industries such that demand for one product creates a demand for another product eg lettuce and tomato growers products come together to create salads.
- That competition among firms within an industry creates an environment conducive to innovation and ultimately international competitive advantage, and
- That chance conditions create an environment for industries to become competitive eg. War in cold countries created a demand for Woolen products.

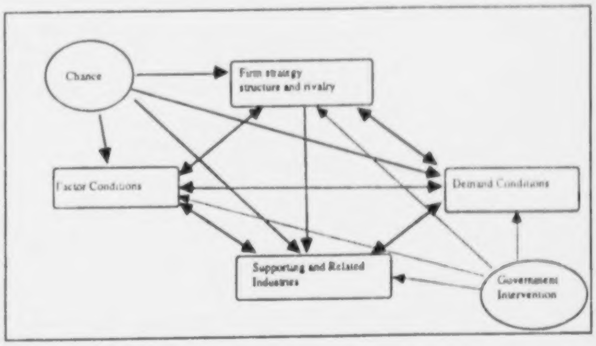

Chance
Firm strategy structure and rivalry
Factor Conditions
Demand Conditions
Supporting and Related Industries
Government Intervention

Figure 6: Porters Diamond

Porter recognises that Governments also create the environment in which industries develop and that they play a role in influencing advanced factor creation, firms strategies, industry structure and in regulating demand conditions for an industries products In this context Porter stresses that Government policy towards industry must recognise that policy strategies are intervening in a system requiring many policy initiatives to be interdependant (Porter M 1990)

Using Porter's model of competitive advantage it is possible to classify various policy instruments of the DPIE and its branches by the industry segments that the policies are aimed at see figures seven and eight

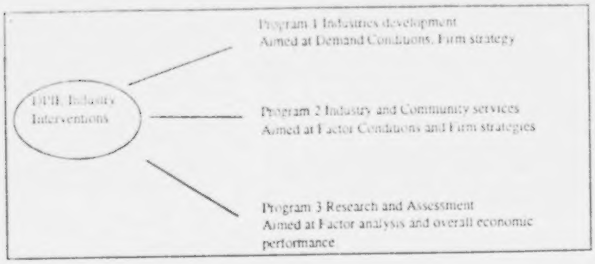

DPIE Industry Interventions
Program 1 Industries development
Aimed at Demand Conditions, Firm strategy
Program 2 Industry and Community services
Aimed at Factor Conditions and Firm strategies
Program 3 Research and Assessment
Aimed at Factor analysis and overall economic performance

Figure 7 The DPIE Programs

The specific programs the Rural Policy Branch administer are those involved in program two

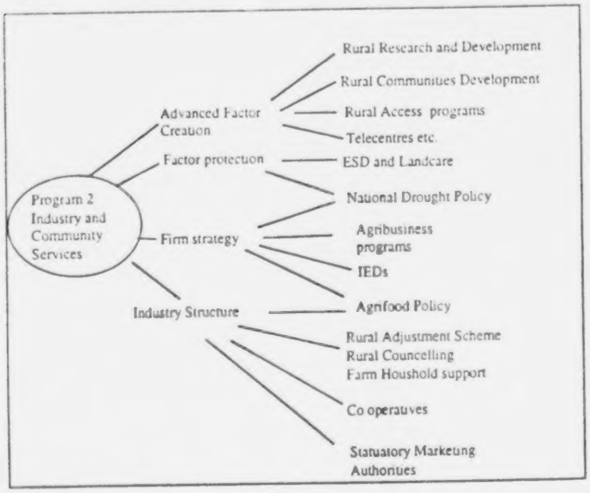

Program 2
Industry and Community Services
Advanced Factor Creation
Factor protection
Firm strategy
Industry Structure
Rural Research and Development
Rural Communities Development
Rural Access programs
Telecentres etc
ESD and Landcare
National Drought Policy
Agribusiness programs
IEDs
Agrifood Policy
Rural Adjustment Scheme
Rural Councelling
Farm Houshold support
Co operatives
Statuatory Marketing Authorities

Figure 8 The target for rural policy initiatives.

In the rural policy branch some people are aware of the paradigms that have inform thinking behind policy development and debate does occur for instance-

> "Broadly speaking there are clashes, there is less sympathy for economists and scientists It is now possible to question Neoclassic Economics"

and some individuals have taken exception to Pusey's 1991[26] thesis on the dominance of economic rationalism

"Economic rationalism rampant for a decade - not true. It is true that policies on primary industry have had an important objective to put industry on a more competitive footing"

A paradigm shift is occurring in the way the Division and Branch see there role in intervening in the rural community Rather than maintaining farmer dependancy on government institutions to see them through the rough times the division is moving down the rural development line of community empowerment through facilitation and training. These developments have come off the back of the success of Landcare in empowering community groups to take control of land degradation issues. This self help facilitation model will play a greater role in nearly all future extenson strategies the Department is engaged in

The overriding behavioural model of

> "Yes Minster" where "The ministers brief is (having a rural vision), telling people what to do and then providing assistance to change." and "Finding the levers to adjust so that people come in behind the vision"

tends to clash with the divergent view of

> "People change is not a simple matter. Industry is linked to community and other change processes within the community, A lot of pressures (abound) which don't relate directly but do affect performance eg the need for off farm income" and,
>
> "Social Science discipline, community development models, self actualisation, and listen to the community"

are becoming mental models that inform the developments of policy strategies within the branch. Even so clashes occur as the policy statements start to progress through the administrative filters.

MONITORING AND EVALUATION

The emerging development philosophy is that programs are based on a self help/ facilitation, education paradigm aimed at empowering the farming community to cope with international competitive pressures. While the Rural Adjustment Scheme is used to pick up the fallout and by default provides an indicator of the sustainability of farm businesses there appears to be no process in place for evaluating the capacity building capabilities of the programs. That is, assessing how development programs are helping farmers and rural communities to develop the capacity to become sustainable (Elliot 1989)[27] This issue may be further exacerbated at the community level where the working group on Sustainable Agriculture is having difficulty identifying off farm social indicators for assessing sustainability (Hamblin et al 1993[28]).

As with all government programs financial auditing is the primary method of monitoring the performance of the branch. With some new programs market research is used to determine the penetration of programs into the community. A number of officers suggest that the evaluation of the impact of programs should be incorporated into the delivery of programs themselves. This fits in line with recent developments in the Rural Adjustment Scheme where a managment information systems linking the states to the Federal RAS Branch is to provide information in order for the Branch to more effictively monitor the effectiveness of the scheme in assisting in structural adjustment. (RASAC, 1993)[29]

COMMUNITY NEGOTIATING SYSTEM

The difficulty of community consultation was raised by Miller in his address to a food and fibre industries symposium (Miller 1993:31)[30]. The complexity of the interactive process of improving economic performance has in part been addressed by the development of Industry councils in order to pursue a concensus on industry policy. Added to this the Rural Access Programs where developed to inform rural communities of the programs being offered.

In figure nine the rural policy branch and the Department are shown to be immersed in a complex web of social interactions that could be loosely coined the Rural Policy Community. This representation aims to capture the complexity of the web of formal social interaction. Although not represented another important source of information and opinion pointed out by policy officers within the Branch is through the informal personal networks of friends and associates. This applies to the Departmental officers as well as incumbents within the Minsters office.

An important feature of this communications network is the apparent lack of or minimal direct interaction with the rural community by Federal bureaucrats. It appears that virtually all information about the community comes through a large variety of government and interest group filters. Other values and agendas

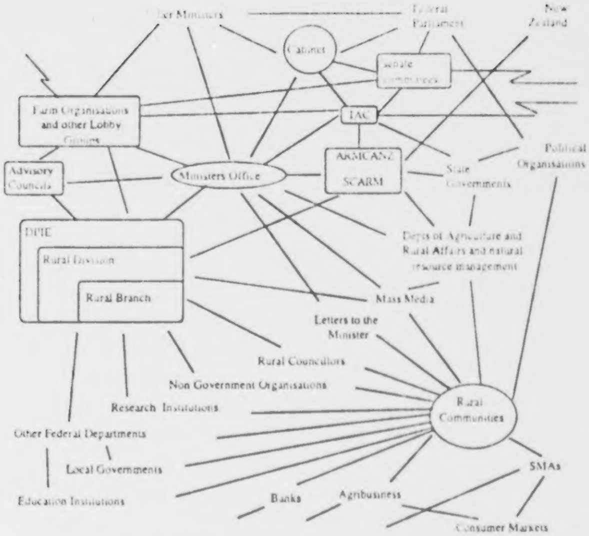


FIGURE 9: The Rural Policy Community's Communication and Neqotioation Web

that filter information include those of Non Government Organisations, the media and NFF. Direct input from the Rural community via letters to the Minister and submissions to advisory councils, standing committees and the IAC. may involve only 13% of the community (Wade 1972)[11].

Given this context how does the Government negotiate with the community? A vexing question and one which has interest in the Branch. How do you engage the broad community as stakeholders in the process of policy debate?

DISCUSSION

A model of a forward looking and systemic orientated Learning Governance Structure has been used here as a critical construct for evaluating a policy development process in Australia. As an outcome it is possibble to argue that Rural Community Development Policy in Australia can not be seen purely as a product of any one Branch, Department or Ministry and that the process of policy development is both convoluted and protracted. Within this context though the Rural Policy Branch does provide an important focal point for coalescing the various stakeholders' agenda into workable strategies for developing a competitive rural sector.

As a learning organisation the Branch, Divison and by inference the Department theoretically has lots of problems. Due to the high turnover of staff at all levels, the Department is not able to capture the experience of personel into competent "expert groups" in specific policy areas. This issue is further compounded by the lack of structures and processes for providing adequate feedback on the outcomes of implemeted strategies.

A generalised systemic model of industries does inform developments in the overal policy framework. This model is based on ideas of the Competitive Advantage of Nations developed by Michael Porter M1990)[12] and underpins much of the Federal industry policy. Systems and futures research methods geared towards testing the assumptions underpinning the policy frameworks though are non existant. As Forrester points out

> "We change laws, organise forms, policies and personal practices on the basis of impressions and committee meetings, usually without any dynamic analysis adequate to prevent unexpected consequences" Forrester 1992: 201

To be fair to the policy unit

> "The great challenge for the next several decades will be to advance understanding of social systems in the same way that the past century has advanced understanding of the physical world" Forrester 1992: 200.

The challenge here is that "research into complex phenomena involves the investigation and understandings of systems of phenomena rather than of single cause and effect relationships. Such research is concerned with situations where although perhaps not all variables are interconneted most are interconnected and interact in complex, often mutually determanistic ways" Rowe H 1993[13]

As an "open self critical community of inquiry" The process of working groups, senate committees and advisory councils provide a mechanism to feed back to the policy stakeholders information and opinions about the various policy instruments in play. Ministerial mail is also a primary source of information to the bureacracy but there appears to be no process to allow community based consultation over the strategies of policy initiatives before they are implemented.

Three areas where further research could occur in the areas of rural policy development are:

- Futures and systemic thinking applied to Rural Australia
- Evaluation of the impact of programs, and
- In the development of communicative processes for policy debate with the broader rural community.

So do we have a governance structure appropriate to facilitating sustainable rural development. If you look at a rural policy branch in isolation it appears there are major deficiencies. One thing this exersize has demonstrated to the author though is that the process of policy development engages the whole community to certain degrees and that it is not appropriate to look at a Branch, Division or Department in isolation from this broader community. When looked at from this perspective all the resources of the community play a role in the Governance structure.

What is certain is the emerging dominance of a policy framework which could be loosely called social darwinism.The main aim of these policy instruments being to facilitate individuals and communities to adapt and evolve in the face of a changing world, to help individuals manage economic and environmental risk and to provide a social justice package to pick up the fallout. If a conception of sustainability is the ability to manage evolutionary forces rather than conserving the status quo then the framework has the potential to achieve sustainable development.

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DOWN — BUT NOT OUT: ASSESSING THE IMPACT OF LOW WOOL PRICES ON TENTERFIELD SHIRE ON THE NORTHERN TABLELANDS OF NSW

G J Warr, A Muir, S Maguire, S Orr, C Shands, R Marchant and L Greer — Australia

ABSTRACT

The aim of this project was to assess the impact of low wool prices on wool producers, commercial businesses, town and rural services in the Northern Tablelands of New South Wales The Tenterfield district was selected as it represented a small community significantly dependent on rural income from wool and sheep

In the first phase of the project a Rapid Rural Appraisal technique (Carruthers & Chambers 1981) was used to identify the main issues and concerns of the community in relation to the impact of low wool prices

The second phase of the project was designed to further expand on the information collected by the Rapid Rural Appraisal and involved the use of focus groups (Folch-Lyon & Trost 1981) to further examine issues related to the wool crisis and identify producer needs Focus groups were conducted with

- Wool producers under 50 years of age
- Wool producers over 50 years of age
- Farm women who are wool producers
- School children of wool producers (Year 8 to Year 12, Tenterfield High School)

Results

The major issue raised was lack o cash income Lack of income severely affects the major suppliers of rural services and restricts the ability of producers to adequately care for stock, employ labour, maintain plant and machinery , provide food and clothing for the family, educate children and, most importantly, provide for a much needed break away from the farm

Other results were a lack of knowledge of assistance measures available, increases in stress-related health problems, unemployment, decline in farm spending on services and farm inputs and effect on transfer of the farm to the next generation

Phase three of the project involves developing action plans for producers to address identified needs

1. INTRODUCTION

In the depths of the Wool Industry crisis in early 1993, with the wool stockpile at record levels, the Reserve Price Scheme abandoned and wool prices at their lowest levels for 20 years, the Australian Government announced an extensive review into the Wool Industry The Review, to be headed by Professor Ross Garnaut of the Australian National University, had the following terms of reference (Commonwealth Government 1993 Garnaut Review)

- To examine the influences that will affect the supply and demand of wool over the next decade.
- Examine the effectiveness of the industry structures;
- Examine the factors affecting the profitability of wool production; and
- Examine the efficiency of the social justices and adjustment measures as they apply to the wool industry

NSW Agriculture formed a Working Group to prepare a Departmental submission to the Garnaut Review, which was to include wool production in NSW, market developments, industry adjustment (both human and production), promotion and research, and other marketing issues

In addition, the Working Group was to examine processes that NSW Agriculture staff could use to assist wool growers and other primary producers through the critical industry adjustment phase.

The Working Group had access to sufficient information to address the first two terms of reference of the Garnaut Review, but there was little information available to address the last two terms of reference of the Review.

In the only other study of changes in wool prices in the northern tablelands of NSW, Stayner (1990) examined the economic impacts of higher wool prices on the town of Guyra and found that a rise in wool price was unlikely to have a dramatic effect on the economy of the town. He also believed that a subsequent fall in wool prices would be unlikely to have a severely depressing effect on the town, as the effects on general mood of business and community confidence are likely to be more important than the effects on actual economic flows (Staynor 1990).

However, since the Staynor study significant changes have occurred in the wool industry and the NSW Agriculture Working Group required current, reliable information on the effects of the wool industry decline on producers and communities.

The decision to focus the research on the Northern Tablelands of NSW was made because of the adverse impacts of depressed fine wool prices and current drought conditions on wool producers who were still recovering from a major drought in 1990/91.

The Shire of Tenterfield was selected for this study at a planning meeting at Armidale, NSW, with a group of Tablelands District Sheep & Wool officers for the following reasons:

- Tenterfield was a close-knit community with a substantial reliance on wool and sheep for the region's rural income (ABS Census 1991/92).
- Most agricultural services provided are of a local nature.
- Local women had recently formed a support group "Women in Wool Action Group" for the area.
- The local District Sheep & Wool officer, based in Glen Innes, had good contacts through the local community.

Tenterfield is situated on the Northern Tablelands of New South Wales about 190 km north of Armidale and 160 km east of Inverell, and sits astride the Great Dividing Range. The Shire population is about 3,500, with the town of Tenterfield having a population of about 1,700 (30th June 1986 Census). The New England Highway running south to north divides the Shire into two halves. The eastern half is predominantly used for cattle production, while the western half is predominantly sheep and fine wool production.

2. PROJECT AIM

The aim of this project was "*to assess the impact of low wool prices on wool producers, commercial businesses and town and rural services in Tenterfield Shire*". The information on producer issues and concerns would be available for the Working Group to include in the Departmental submission to the Garnaut Review. It would also be used to enable assistance activities to be formulated for Tablelands wool producers.

This paper reports on the major results and possible implications of the study in Tenterfield Shire in the context of ways to address identified community needs, including the provision of support to rural groups in the district.

3. DATA COLLECTION

The project commenced in May, 1993, and involved four major phases of work.

Phase One

A Rapid Rural Appraisal technique (Carruthers & Chambers 1981) was used to help identify the major issues and concerns of the community in relation to the impact of low wool prices.

Data sources accessed within the Shire included:

1. Wool producers operating properties in the Shire, (including members of the Women in Wool Action Group).
2. Tenterfield businesses providing an agribusiness service to wool producers (stock & station agents, banks, accountants, motor vehicle/machinery dealers).
3. Government/semi-Government institutions such as the Shire Council, Family & Youth Support Service and Rural Lands Protection Board (RLPB).
4. Health/Welfare agencies such as the Churches and the community nurse.

Information was collected through semi-structured interviews to gain a wide range of perspectives and opinions. A total of 30 interviews were conducted, of which one-third were wool producers. In addition, relevant statistics on Tenterfield Shire were collected from the Australian Bureau of Statistics (ABS) and the Australian Bureau of Agricultural and Resource Economics (ABARE).

Phase Two

The second phase of the project was carried out in July, 1993. Four focus groups (Folch-Lyon and Trost 1981) were convened to further examine issues related to the wool crisis and validate identified producer needs. Focus groups were held with:

- Wool producers under 50 years of age.
- Wool producers over 50 years of age.
- Farm women who are wool producers.
- School children of wool producers (Years 8-12, Tenterfield High School).

The District Sheep & Wool officer provided a list of names of wool producers to be considered for the focus groups. The research team phoned each person to gain their cooperation and organise a meeting time and place.

The organiser for the Women in Wool Action Group was contacted and asked to organise a meeting of the Group.

The Deputy-Principal at Tenterfield High School gave approval to meet with students and organised participants for the focus group.

Phase Three

Phase three in September 1993 involved further analysis of data and a planning meeting with the Tablelands Sheep & Wool Officers to explore options for further action.

Phase Four

Phase four in November 1993 involved convening a community meeting to report back to the community on the preliminary results of the project and to enable identification of the main issues to be addressed in follow up action in the Shire.

4. RESULTS

(a) Tenterfield District Situation

Tenterfield Rural Land Protection Board district was drought declared in April 1993. However the district had not had any significant rainfall since late December, 1992.

Most wool producers were either hand feeding their sheep or sending them away on agistment. Fodder reserves were already at low levels following the 1990/91 drought and the adverse seasonal conditions had prevented replenishment of fodder supplies. One producer summed the situation up:

> "....... We are now facing this drought having to buy in all feed, when we are at our lowest in cash reserves........".

Producers had to access cash reserves or borrow to buy fodder. Selling surplus sheep became impossible, so these sheep had to be either carried through on feed or shot to reduce stocking rates.

(b) Factors Affecting the Profitability of Wool Production

The major factors contributing to low profitability included drought, decreased property sizes and flock sizes, low wool prices, farm debt structure, depletion of cash reserves and level of farm financial management.

(i) Flock Size and Property Size

Average size of farms in the Tenterfield Local Government Area (LGA) declined by 37 per cent, from 1290 ha in 1988/89 to 811 ha in 1991/92 (Table 1). Over the same time period, the average number of sheep and cattle per farm also declined markedly.

Table 1:

Average farm size, average sheep and cattle per farm and average wool production for farms in the Tenterfield LGA.

	1988-89	1989-90	1990-91	1991-92
Farm Size (ha)	1 290	946	995	811
Sheep (hd)	3 607	3 353	3 059	2 336
Wool (kg)	13 325	13 494	12 051	8 784
Cattle (hd)	438	347	256	215

Source: ABARE - Australian Agricultural & Grazing Industry Survey (AAGIS) 1988-1992

Sheep numbers declined 35 per cent from 1988-89 to 1991-92, with the fall attributed to lower wool prices and the effects of drought. Consistent with the decline in sheep numbers, average wool production per farm declined by 34 per cent.

(ii) Low Wool Prices

Wool income declined by 66% from 1988/89 to 1991/92 (ABARE AAGIS 1988-1992) and this resulted in reductions in purchases of animal health products, fertiliser, machinery and plant and motor vehicles. Some producers were choosing not to drench sheep. The banks reported corresponding rises in overdraft carry-on finance of up to 150%.

Decreased fertiliser application resulted in lower pasture productivity and decreased animal production, putting pressure on wool producers to cut costs further in an attempt to meet interest and principal payments on loans.

In regard to machinery/plant and motor vehicles, the philosophy changed to one of "repair, not replace."

Farm Financial Performance measures (Table 2) indicate a 175% decline in average farm business profit from 1988/89 to 1991/92.

Table 2

Financial Performance Measures (average per farm)

	1988-89	1989-90	1990-91	1991-92
Farm cash receipts	280 505	228 231	163 22	93 358
Farm cash costs	190 726	171 443	125 010	82 092
Farm cash income	89 779	56 788	28 21	11 263
Farm business profit	45 455	22 466	- 3 194	-34 109

Source: ABARE, AAGIS survey 1989 to 1992

(iii) Farm Debt Structure

The bankers interviewed reported that from early 1992 to mid-1993 they had observed an increase in the number of bank clients who had moved into an "at risk" situation as a result of increasing debt levels.

Producers who were in debt prior to the wool crisis and drought had major difficulties in servicing that debt, while at the same time experiencing decreased equity in their business.

However, there were many producers moving into debt for the first time in many years, with projections on cashflow for 1992/93 predicting net cash deficits of up to $100,000 on sheep properties (ABARE Outlook 1992).

In both cases producers markedly reduced spending to compensate for expected neutral or negative incomes. To illustrate the extent of spending decreases, average per farm services and contract costs from 1988/89 to 1991/92 are shown in Table 3.

Table 3

Average per farm service and contract costs ($)

	1988-89	1989-90	1990-91	1991-92
Accounting	2162	1698	1815	1438
Hired labour	21623	20539	14199	7249
Fertiliser, fodder, seed, chemicals	24991	19002	9785	10792
Freight	1599	1787	1026	2181
Fuel & lubricants	6260	7144	5607	4549
Marketing costs	14374	12581	25746	9551
Motor vehicle expenses	4150	3308	360	1900

Source: ABARE, AAGIS 1988 - 1992

(iv) Farm Financial Management

The major banks were of the view that financial management skills of producers needed to be improved. The bankers believed they were encouraging their clients to keep better financial records, but felt that some producers really do not want to know about financial management. "........ farmers think that they are being picked on, but they do need a business plan ...."

Generally, producers over the age of 50 did not seem interested in improving their financial and business skills, while younger producers were more likely to become involved in activities to improve financial and business skills. At the same time, women appeared to be taking a more active role in doing the "book work".

The accountants interviewed were keen for their clients to use them more for farm management services rather than just for taxation purposes. However, the increased costs associated with such a change may mean a slower uptake of these services.

Little was known about the NSW Department of Agriculture's farm management program FARM Cheque, and the accountants felt that producers would not be able to see the long-term benefits that this program could bring to their business.

Generally, there was a mixed response to the use of computers in farm financial management. Some producers did not want to know about them at all, while others were of the opinion that they would be good for management yet they did not know how to use them to best advantage.

(c) Efficiency of the Social Justice and Adjustment Measures as they apply to the Wool Industry

Lack of cash income severely restricted the ability of producers to adequately care for stock, employ farm labour, maintain plant and equipment, provide food and clothing for the family, education for the children and, most importantly, provide for a much needed break away from the farm.

The picture emerged of a community just beginning to suffer from the effects of low wool prices and three years of below average rainfall. There is a belief that there are some producers who will have to leave the industry - especially those who have struggled even in the good years.

(i) Knowledge of Assistance Available

There are many programs and services available to assist wool producers through the period of crisis. However, knowledge of these programs or services was limited. Government programs such as the Rural Adjustment Scheme (RAS), Job Search or New Start initiatives from the Commonwealth Employment Service (CES) or welfare assistance from the Department of Social Security or the Department of Community Services were not well known in the area.

Services such as those provided by the NSW Rural Womens' Network or telephone counselling and support provided by organisations such as the Sisters of Charity with the Country Care Link were not being accessed to provide support to wool producers and their families. However, the recently formed Women in Wool Action Group had greatly assisted in the provision of information on assistance available. The groups' aim is to build self-esteem and motivation for members and their families and break down the isolation of members' individual situations, as people are working longer and harder and shunning contact with friends and neighbours.

Local support organisations such as the Churches, Salvation Army, Red Cross, Family and Youth Support and Community Health were already overloaded with requests for assistance from town people but stated that they had not observed at that stage an increase in requests for assistance from wool producers.

(ii) Employment Opportunities

Employment opportunities have been severely restricted with the closure of the local abattoir, and relocation to other centres of the State Rail Authority, Roads & Transport Authority Depot and Department of State Forests.

Most farms did not employ permanent labour, while casual labour opportunities were limited to sheep shearing. Producers were surviving by taking employment as shearers, contract fencers, fruit pickers in Queensland, running small scale transport operations, growing small cash crops under irrigation or leaving the district to find work. There had also been an increase in applications for Job Search Allowance for farm wives.

The impact of the decline in wool prices and drought was reflected in the drop in average farm expenditure on casual hired labour by 66 per cent, from $21,623 in 1988/89 to $7,249 in 1991/92 (Table 3). When this figure was aggregated across all farms, the drop in expenditure on hired labour in the LGA was approximately $6.3 million.

(iii) Health

The Community Health Worker observed increases in stress-related health problems among the unemployed in Tenterfield. The unemployed suffered from low self-esteem and depression and this had caused marital stress and increased domestic violence, alcohol abuse and youth problems.

In some cases farm families had come under stress, with husbands having to travel away to find work.

(iv) Education

Few children were away at private schools, although some were forced to board away because of poor access to bus routes and large distances from town. This resulted in extra strains on farm finances to provide for this expense, as in most cases AUSTUDY was not accessible due to high asset levels.

The focus group with the school children revealed the extra strains children in the area had to cope with ....

"get home at 5 pm, feed all animals, get in at 6.30 pm - don't have electricity, can only run the generator until 9.30 pm. I physically can't put in the time - 100 km round trip from home ...."

"........ I know I could be doing better in my subjects but there is no time ....".

"........ Most spare money has been spent to feed stock - now Dad has had to go off-farm for paid work ....".

"..........I would like to go to Uni .... but unless I take a couple of years off and work there is no way that I will ever get there ....".

Tenterfield College of Technical and Further Education was in the process of developing an external course in financial management for farm women which would improve financial skills and lead to better farm business management.

(v) Living Standards

There was no doubt that living standards of wool producers had fallen markedly. In some cases the Family Allowance Supplement was the only source of family income. There were indications given that children's cultural and recreational activities had been affected, while producers' expenditure on personal items had decreased and they were not coming to town as often; " ——— can't afford to buy new bed sheets ———".

(vi) Effects on Town Businesses

Businesses primarily servicing the rural sector had suffered significantly. New car sales had fallen markedly, while the car repair industry was buoyant. Demand for good quality used four-wheel drive vehicles was strong.

One tyre dealer reported a 15 per cent decrease in turnover, with no sales of tractor tyres and one employee put off. Producers were buying used tyres and changing their own tyres.

Stock and station agents have had to depend on cattle sales and real estate to survive. Commissions from wool sales were down, while they were forced to carry less stock to assist cash flows.

Producers were taking longer to pay accounts. Accountants reported decreased contact with their clients.

(vii) Farm Transfer

Perhaps the most telling issue was the lack of young people coming back into the wool industry, as most farms were finding it difficult to provide a living for one family. The majority of woolgrowers in the district are aged in their 50's and 60's, with few below 40 years of age. However, many young people felt there was no point in them taking over the farm. " ——— I don't see any future for us to go back onto the land ——", " ——— Unless you have a lot of money - without borrowing! - After you see people go through that you think NO WAY ——".

Producers with savings or investments were using those to survive, thereby delaying the time when they could retire. The older generation were becoming increasingly locked into the farm.

(viii) Industry Adjustment

Provision of interest subsidies through the Rural Adjustment Scheme (RAS) did not seem to offer much to producers in need of immediate cash income. One problem raised was that to qualify for the RAS productivity improvement subsidy, the perception was that producers would need to go further into debt. Producers believed they should become self-reliant, but in the current situation, felt some help was urgently required.

There was concern expressed by both producers and accountants that those producers who really needed assistance were not receiving any. Producers believed that if they had no debt or were about to go into debt then it was very difficult to obtain assistance, especially through RAS. Producers believed that in the current situation cash assistance would be of more value than interest subsidies.

5. ACTIONS ARISING FROM THE PROJECT

(i) Information for Submissions

Preliminary information from Phase One was forwarded to the NSW Agriculture Working Group, and was included in the Departmental submission to the Garnaut Review. In addition, the information was also provided to the NSW Farmers' Association, where it was included in that organisation's submission to the Review.

(ii) Community Actions

The major results were discussed at a community meeting in November, 1993. At this meeting, three priority areas were identified for follow up action:

- financial planning
- marketing of products
- physical property planning

Work on these priority areas has commenced, with NSW Agriculture running a workshop on financial record keeping and using a cashbook. In addition, discussions have been held with the Women in Wool Action Group about running a workshop on the use of computerised cashbooks.

The Department of Conservation and Land Management has run several property planning workshops in the area, with further work planned.

(iii) Community Impacts

Main street retail businesses were shielded to some extent from the crisis by passing trade from tourists to the area.

We found, however, a general mood of depression in the community brought about by uncertainty over what the future would bring. The closure of the abattoir severely reduced employment opportunities and reduced the amount of disposable income flowing into Tenterfield. Coupled with decreased income from wool production, community confidence in the future for Tenterfield was low, with wool producers especially, having feelings of hopelessness about being able to survive on their farms.

Staynor (1990) believed that rises and falls in wool prices did not impact significantly on the economic prosperity of Guyra, but stated that the general mood and confidence of the community was a significant factor in assessing how communities react to situations. In this case Tenterfield community confidence was very low, with future prospects at the time of this study not promising.

(iv) Implications for NSW Agriculture Programs

This study reaffirmed the view that district staff need to address both short term activities and long term strategies when formulating action plans to assist wool producers.

Short term activities would target financial and human issues which require little technology input. The primary role for district staff would be the provision of information to the whole community, and not just wool producers, on assistance measures available. This study found that many of the organisations involved in assisting producers were not aware of the full range of assistance programs available.

Longer term strategies which are more technology based would then be needed by district staff to assist remaining wool producers return to a viable operation.

(v) Benefits to District Staff

Participating in the research team brought a number of benefits for the Tablelands Sheep & Wool Officers. Arising from the study was the major issue of being able to identify community needs and know who are the appropriate providers of information to satisfy those needs. The use of and experience with techniques such as Rapid Rural Appraisal, Focus Groups and Needs Analysis can quickly provide district staff with an appreciation of community issues and needs and assist in the development of action strategies to satisfy community needs.

6. ACKNOWLEDGMENTS

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The authors gratefully acknowledge the assistance and information provided by wool producers, business people and others in Tenterfield Shire who willingly shared valuable information.

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WORKING FOR RURAL COMMUNITIES IN NEW ZEALAND: THE RURAL RESOURCES UNIT OF NZ MAF

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ABSTRACT

Wholesale restructuring of the New Zealand economy over the past decade has led to profound changes for rural communities in that country. Rural was no longer synonymous with agricultural, and neither carried much weight with policymakers. At the same time, changes within the Ministry of Agriculture (MAF) reduced the number of staff in the field. As a result, the Ministry found itself increasingly out of touch with a rural sector it knew less and less about. The situation was even more pronounced for other Government departments.

In July 1991, the Rural Resources Unit was established within MAF. Its objectives were to renew lost linkages with rural networks, and ensure that the rural sector had access to the tools necessary for it to prosper. A large part of this mission involved making sure that other Government departments understood and considered the rural point of view when making policy.

This paper discusses the development of the RRU, and the key projects and work areas undertaken. It details some of the experiences gained in the first two and a half years of the Unit's operation: the successes and failures, the pitfalls and practical realities of being a small, under-resourced unit dealing with some very major issues.

The writer also describes the experiences of her own unique position as a "Head Office" policy analyst working from a rural office with field responsibilities.

INTRODUCTION

This paper discusses the work of the Rural Resources Unit (RRU) of the New Zealand Ministry of Agriculture and Fisheries (MAF). In particular it focuses on the Unit's work in the area of rural communities. The purpose of the paper is to provide background on MAF's work in this area for an international audience, and perhaps offer some insights for groups doing similar work in other countries.

The paper begins by providing some background on the extensive restructuring which has occurred in New Zealand over the last decade. This sets the work of the RRU in context, for it is the large scale changes in both agriculture and MAF which have determined the nature and role of the RRU. The work of the RRU is then discussed in some detail. Finally, a personal perspective is provided by outlining the work of the author herself.

ECONOMIC RESTRUCTURING

The election of a Labour Government in 1984 marked a sharp turning point for the New Zealand economy. Implementing large scale reforms of the sort one would normally associate with a right-wing party, the Government sought to turn a highly regulated and protected economy crippled by debt into a thriving example of market forces at work.

In agriculture, the entire framework of Government support was dismantled, much of it within the first year. Subsidies on inputs and land development were removed, as were minimum price schemes for meat, wool and dairy products. Coinciding with low international prices for most products and a rising exchange rate, on-farm returns were hit hard.

Almost as significant as the financial blows dealt the agricultural sector was the new philosophy which saw agriculture as a sunset industry, no longer crucial to New Zealand's success. The popular perception was that while the country may once have ridden on the sheep's back, it was now glamour industries such as software development where the future lay. Urban residents no longer saw their welfare as inextricably bound up with the welfare of rural areas.

It is true that the importance of agriculture [illegible] the New Zealand economy has declined, and this process began well before 1984. Agriculture (not including further processing) accounted for 15% of GDP in 1960/61, 10% in 1980/81, and only 6% in 1992/93. The drop is even more marked in terms of exports. Agricultural products constituted 92% of New Zealand's total exports in 1960/61, 62% in 1980/81 and 56% in 1992/93. The entry of the UK into the EEC in 1974 played a major role in this change, with New Zealand no longer able to rely on its role as "England's farm".

Nevertheless, agriculture continues to be a crucial component of New Zealand's economy, particularly when considered in its widest sense, to include upstream and downstream industries.

Meanwhile the nature of rural areas has been changing. While once the terms agricultural and rural could be used almost interchangeably, there is now a growing proportion of the rural population which are not involved in agriculture. Less than 50% of the workforce in rural areas are engaged in farm production or agricultural servicing. In addition, many people who live on farms have a financial interest, or work, in other industries.

RESTRUCTURING OF MAF

The public sector was exposed to the same restructuring drive as the rest of the economy. MAF, particularly as a "sectoral" Government Department, came in for a significant shake up.

In 1987 the ten divisions of MAF were reorganised into four businesses, and the move to cost recovery for services, begun in 1984, intensified. Part of the deregulatory philosophy was the need to separate the policy and delivery functions of Government, and in 1990 this split was implemented at MAF. This split served to distance policymakers from the sectors and groups they were designing policy for. While this reduced the risk of "capture", it also made it more difficult for policymakers to keep in touch. This problem intensified as more of MAF's delivery functions were moved onto total cost recovery and/or removed from the Ministry altogether. In 1992, the research section of MAF was separated, and the extension arm, Management Consultancy Services (now Agriculture New Zealand), prepared for sale. The farm advisers had been a key link with farmers and rural communities, but the move to full cost recovery had sharply reduced the amount of contact, while the move towards sale weakened the link at the other end with policymakers.

The connection with rural people was weakened in other Government departments as well. The Department of Maori Affairs, which historically had played a major role in the development of rural Maori land, became the much-reduced Ministry of Maori Development. The Department of Lands and Survey retained its mapping and survey functions as the Department of Survey and Land Information (DOSLI), while crown-owned farms were put into Landcorp, a State-Owned Enterprise (SOE). The Rural Banking and Fiance Corporation (Rural Bank) was sold. The Department of Education was replaced by a purely policy Ministry, and the running of schools was devolved to local Boards of Trustees. Similar changes occurred in a number of other departments with rural responsibilities.

Those departments that maintained a presence outside Wellington were ones with delivery functions, and the policy/delivery split meant that there was little input from regional offices in policy development. Even for these departments, the drive for efficiency led to increased centralisation and the movement out of smaller towns to regional centres. Some agencies, for example the Community Employment Group of the Department of Labour, were specifically tasked with working with rural people, but in practice this has been limited to small towns, rather than truly rural.

The net result was a Government increasingly out of touch with a rural sector it knew less and less about.

DEVELOPMENT OF THE RURAL RESOURCES UNIT

The Rural Resources Unit had its origins in the Rural Policy Unit, a small group within MAF Technology responsible for monitoring trends and developments on-farm, including managing adverse events relief. With the policy/delivery split in 1990, the RPU was separated from MAF Technology and became part of the new MAF Policy.

During this time rural organisations were becoming increasingly concerned with Government policy impacts. Rural areas, in the grip of an economic downturn brought about by overseas factors coupled with a rising exchange rate, were hard hit by deregulation and the move to policies such as user pays. The Government presence in rural areas all but disappeared. Rural dwellers felt that Government policy was being driven too much from Wellington, by Treasury economists unaware of the realities of rural life.

To counter this, they called for a separate Ministry to represent their interests and ensure they were not disadvantaged by new policy developments. Similar Ministries were in existence for Women, Pacific Islanders, and Youth, while a rural model was provided in the Office of Rural Affairs established in Victoria, Australia.

The concept of a separate Ministry of Rural Affairs was rejected by Government, but it was recognised that MAF could have a role in monitoring and providing advice to Government on rural communities. One of the outcomes specified by the Minister of Agriculture for MAF in the 1989/90 year was

> Soundly based and lasting development of rural and fishing communities, enabling them to contribute even more effectively to New Zealand's economy and culture. (MAF, 1990:4)

In 1991, a rural affairs capability was added to the RPU. With increased rural sociology expertise, the Unit was able to take on a new role, reflected in the following mission statement:

To help rural New Zealand achieve prosperity and well-being by

- working with, listening to and understanding rural people
- providing intelligence, analysis and policy advice to Government
- interacting with Government Departments and other agencies concerned with rural New Zealand
- channelling information back to rural communities, and
- managing the implementation of programmes and policies as required by the Minister of Agriculture (MAF, 1991a:4)

The following year, the name of the Unit was changed to the Rural Resources Unit, to better reflect its wide-ranging work. To provide the much-needed improved links with rural areas, the RRU's field presence was expanded significantly, from four to 18 full-time equivalent positions. Two analysts based outside Wellington were hired, while 20 policy agents were contracted on a part-time basis from MAF's advisory service. The nine Head Office based staff were also encouraged to travel outside Wellington frequently and maintain their links to rural areas.

HISTORIC COMMUNITY WORK WITHIN MAF

The RRU does not represent MAF's first foray into the broader world of rural communities. In 1944 the Rural Development Division was established in an attempt to widen the then Department's on-farm focus:

> In recent years it has become more and more evident throughout the world that the success of the agriculture of any country does not depend merely on its soils and climate and the technical efficiency of its farmers, with which work the Department has long been primarily concerned with in the past. It has been gradually realised that agricultural economics and the sociological aspects of farming are equally important and play their part in determining the success or failure of our agricultural industries. (Dept of Agriculture Annual Report for 1945, quoted in Carter, 1988:217)

This division included a rural sociology section, but its only trained rural sociologist was director Donald Viggers. His staff were three home scientists, who displayed what Carter describes as "a trained incapacity for rural sociology" (1988:219). Certainly the first project undertaken in 1945, a survey of farm housing needs, was a spectacular failure, and no further major research projects were carried out. The reality of the section's work was recognised in the late fifties, when the Rural Sociology Section became the Home Science Section, eventually abolished in 1972 (Nightingale, 1992:232).

This episode of MAF's history is pertinent, for it left a legacy in the form of a notion that rural sociology and community-focused work equated to women's issues, and was therefore trivial. Even with the ultimate formation of the RRU and its brief to cover rural communities, this underlying belief continues to raise its head.

WORK PROGRAMME OF THE RRU

The MAF Policy Group Contract for 1993/94 lists nine outcomes to guide the work of that group. Four of these apply to the work carried out by the RRU. They are:

- benefit to all New Zealanders from the resource base for agriculture being used in the most productive and sustainable way
- an agricultural industry that is confident, self-reliant, profitable and forward looking
- a legislative and policy framework for the agricultural industry and rural communities which allows initiative, provides consistency and certainty and ensures accountability
- adequate access to information and basic services for rural communities (MAF, 1993b:6).

The RRU continues the work of the original RPU with its on-farm focus, including farm monitoring and intelligence reports. Central Government has taken a smaller role in adverse climatic events relief in recent years, reducing the work of the Unit in this area. In addition, the traditional requirements of any Government body in terms of Ministerial servicing must be met.

This paper, however, focuses on the newer work of the Unit, in the social area. Encouragingly, there is significant and increasing overlap between this "new" work and the "traditional" work of the Unit. This is especially true as the RRU undertakes more comprehensive and holistic programmes, such as their work in sustainable agriculture and integrated rural development (discussed below).

The focus of the work carried out by the RRU has shifted, from a passive monitoring/intelligence role to an active facilitation role. Clearly, however, the first is a requisite for the second, as a good information base is crucial in order to achieve effective facilitation. As noted above, a considerable information gap had developed where rural communities were concerned. Therefore a significant proportion of RRU efforts in the social area have gone into building up a data base on rural communities - who they are, and what they are doing.

Facilitation also requires working in partnerships, and significant effort has also gone into building up networks at all levels - with central Government (at both local and national level), local government, rural organisations, schools, agricultural industry, research bodies, iwi, and so on. These well-developed networks permit the two-way information flow that is central to the RRU's mandate.

As a final general point, it is worth noting that much of the work of a social nature, particularly in terms of assembling the data base, was originally contracted out as operational research. With budgetary pressures and as RRU staff expertise has grown, most work is now carried out in-house.

The paper now looks at four specific areas of RRU work where there is a strong accent on rural communities. These are: sustainable agriculture, integrated rural development, provision of services, and information dissemination. The division into these four categories is a convenient tool for discussion, but it should be noted that there is considerable overlap between all four. This section provides an overview by highlighting particular examples, and by no means provides an exhaustive account of RRU work.

Sustainable Agriculture

The sustainable agriculture programme is one of MAF's major work areas, involving staff from throughout the Ministry. It is in turn part of a larger Government strategy for sustainable land use. In a position paper released last year (MAF, 1993a), the Government has clearly stated that sustainability is not limited to physical factors, but includes social and economic factors as well.

The RRU's focus at farm and community level means it is a key player in the sustainable agriculture programme. Use of the RRU's field network was made to discuss sustainability issues with over 200 stakeholder groups in order to set priorities for future activities. Some of the initiatives undertaken include establishing a demonstration farm, the McRae Trust, to show sustainable practices in action, and the development of resource kits for teachers at three levels.

The social policy group within the RRU is making a number of contributions to this programme. For example, work is underway to develop strategies for increasing the participation of women in farm and agricultural sector decision-making. Given the importance of the social and economic elements of sustainability, it is crucial that women become involved in initiatives such as landcare groups or demonstration farms. Specific issues with implications for sustainability are also being investigated, such as intergenerational farm transfer and the structure of farm households.

Integrated Rural Development

Historically, rural development was carried out by assisting the agricultural sector. Only recently have the importance of other sectors to the rural economy been recognised, and the move made to promote regional development by helping communities to help themselves.

A key initiative here is MAF's support of local rural strategy/opportunity groups throughout the country. These groups have undertaken a variety of activities to improve performance of existing businesses or encourage alternative enterprises. In some areas strategic directions for the area as a whole have been mapped out. Information sharing between groups has been encouraged through a MAF newsletter and an annual meeting of representatives from each group.

Another example of work in this area is programmes carried out with local Maori groups to assist them to assess their own needs, identify their resources, or develop skills in the area of financial and resource management. RRU staff also facilitate Maori development by bringing together those with ideas and enthusiasm with those having knowledge or capital.

Another project involves identifying barriers to farmers employing more staff, and encouraging farmers to be better employers. This also involves staff from other Government Departments and other agencies. Findings from this pilot project will be directed to a Task Force on Employment recently established by the Prime Minister.

RRU are also involved in analysing the impacts of changes in land use. Currently in New Zealand large areas of agricultural land are being planted in trees for timber production, and it will be important to understand the impacts of this on aspects such as infrastructure, demographics and regional development. This work involves close cooperation with the Ministry of Forestry.

Another project involves looking at the scope for tourism in rural areas, and particularly at addressing the information needs of farm families considering offering farmstay holidays or accommodation.

RRU staff provide input into international fora on rural development. For example, significant input has been made into the OECD Rural Development Working Group's policy formation process and into the OECD rural indicators project. We also provide New Zealand's representative on the rural area working group of the Australia/New Zealand Standing Committee for Agriculture and Resource Development (SCARM).

Provision of Services

One of the most important responsibilities of the RRU is to make sure that other Government Departments and agencies understand the needs of rural people, and the effect that Government policies have on them. This is what the Director-General of MAF described as "providing rural communities with a voice in official circles" (MAF, 1991b:8).

In many ways this can be considered an extension of our work in rural development. Ensuring that Government policies are appropriate for encouraging local initiative and not eroding local infrastructure are ways of assisting development in the regions.

It has been a gradual process of making other Departments aware that there is a rural dimension to their policies. It is heartening to be able to point to examples where policies have been changed to take account of the rural perspective. Successful examples include changes to funding criteria for Community Grants and Task Force Green (an environmental employment scheme); new initiatives by Police in rural crime prevention; agreement from the Hilary Commission to consider funding recreational activities in remote rural areas; and provision of services for rural Maori.

The possible scope for RRU involvement in this area is huge. Most policies have effects on rural communities. With very limited resources, the RRU needs to be selective as to where to get involved. Where impacts on rural communities are similar to those in urban areas, or where other departments and agencies involved have recognised the rural element, MAF limits its input to perhaps just a monitoring role.

In many other cases, however, policymakers entirely overlook rural needs. Working in an urban mindset, policies are advanced which are not workable in rural settings, or involve considerable extra cost to rural residents. In some cases, minor amendments can resolve these problems, while in others solutions are more difficult to find. The RRU's main objective is to make sure the rural perspective has at least been consciously considered.

Some examples of issues in which the RRU has become involved are: school transport formulae (Ministry of Education); rural mail delivery service (NZ Post); provision of library books to rural areas (National Library); upgrading of telecommunications (Telecom); and emergency welfare assistance following adverse events (Department of Social Welfare).

One major area of work which the RRU has yet to tackle properly but desperately needs to is determining fair comparisons of rural self-employed income, particularly farmers, with their urban counterparts. Deregulation has brought with it an increased use of means testing for almost all Government programmes, from health care to school transport assistance. The methods used to assess income disadvantage farmers in particular, who are often the very ones in need of assistance due to their remote locations.

Working with other departments is not an easy task. Some of the difficulties experienced are discussed below. However, when successful it is very satisfying work. Already other departments are more aware of the rural element due to RRU efforts, and are more willing to address the issues themselves without prompting from us.

Information Dissemination

This is the other side of the two-way information flow which is central to the RRU's role. By making sure that rural people are fully aware of the policies that affect them, they are better able to provide comment back on the development of those policies. By making sure that they are aware of and understand existing legislation, rural people are better placed to take advantage of the opportunities it may offer, or avoid the pitfalls.

The RRU information flagship is the **Rural Bulletin**, published monthly and distributed to over 1500 local networks, through which it reaches several thousand people. The Bulletin brings rural people up to date on new policy developments, and advises on how they can have input into the policy process. It passes on "good news" stories of initiatives taken in rural areas; outlines findings of research carried out by MAF and other bodies; and provides information on sources of funding for community groups. An appendix provides a summary of information made available by other groups, with details of how to find out more.

The **Community Help** directory is published annually, providing extensive contact addresses and information about Government and private agency services. Twenty chapters cover the whole range of services from emergency services to transport and communications, from trade and industry to financial and tax, from tourism and recreation to Maori organisations, from health to a directory of Members of Parliament. First produced as a pilot project three years ago, it has been so successful that it is now produced commercially.

As mentioned above, the RRU carries out considerable research into rural communities and issues. This research is distributed in a series of MAF Technical papers. An appendix to this paper lists some of the work undertaken in the social/community area in recent years.

The RRU also organise or help other groups organise meetings, seminars and field-days on a wide variety of topics. We have been involved in some pilot projects involving new technologies too, such as distance learning with conference telephone technology and computer communications networks.

The provision of information is part of an iterative process ensuring that rural communities are involved in policy formation. The information supplied helps rural people provide information back to Government which influences policy which in turn is advised back to rural people.

It can also have positive spin-offs in other ways. A recent addition to the Community Help directory is a listing of Government policies and programmes for rural people. In compiling this section, a number of departments were forced to investigate and assess just what their policies and programmes for rural people were.

MY OWN WORK

Above it was mentioned that the RRU hired two policy analysts based outside Head Office in Wellington. I am one of those analysts. I had worked in another section of MAF Policy for the preceding 3 years, commuting to Wellington from my farm home in Masterton, 100 km to the north over a significant range of hills.

Naturally delighted to be able to work from an office only 10 minutes from my home, I accepted the task of provide policy analysis from a distance along with a regional perspective.

This combination has had its ups and downs. Computer links and trips into Head Office at least fortnightly have kept me up with the policy play, but it is still difficult when there is a last minute schedule shuffle and I am required in the Minister's Office that afternoon! In some instances my overheads are higher, but in other respects I am "cheaper to run" than my Wellington-based colleagues.

On the policy front, I have had responsibility for some significant issues, including the impact on rural communities of extensive reforms in both the health system and electricity industry, and initiatives to improve the health and safety record on farms.

Out in the field, I have coordinated bringing a business management/goal setting course for farming couples to the area, followed by a seminar series on current issues and leadership in the rural sector. I am a member of advisory committees for local organisations such as the East Coast Rural Support Trust. I am also responsible for implementing national RRU programmes locally, such as rural development initiatives and sustainable agriculture (eg helping introduce education kits to local schools).

Finally, I am MAF Policy in my region. This means fielding inquiries on everything from fishing quotas to school project topics. This role has increased as I become more widely known, and as work by other MAF staff in the region is scaled back.

A key problem is maintaining the balance between field work and policy work. The former tends to gobble up as much time as you let it. On the other hand, circulating in rural communities gives me an excellent perspective on the policy issues I am dealing with, and I feel the quality of my policy work reflects this. It also gives me far more credibility in Wellington with those seeking the "real" rural view. For these reasons, I feel the combined role has been very successful, and consider this a useful model for other departments to look at.

ISSUES INVOLVED WITH MAF'S RURAL COMMUNITY WORK

The biggest difficulty in carrying out work relating to rural communities is combating the view that such work has no validity. In the current political and economic climate in New Zealand there is a pervasive attitude that rural people should not be given any "special" treatment.

Ironically, this is exactly the aim of MAF's work in this area - that rural people should treated no differently to urban residents, in terms of access to basic services. Far from seeking to confer special advantages on this sector, our work is to try to minimise the disadvantages they face.

This issue of rural equity is a complex one. The same view that condemns "special" treatment for rural people holds that anyone choosing to live in the country should face the true cost of them doing so. This fails to recognise that many people live in rural areas by circumstance rather than choice. It also ignores the fact that a significant portion of New Zealand's exports and production are generated in rural industries, including agriculture, which generally involve residence in rural areas. It fails to acknowledge any benefit accruing to urban centres as a result of vibrant, thriving rural communities. Finally, it dismisses any notion of social equity, which might indicate that all members of society should have reasonable access to basic services.

Besides active antagonism, RRU social policy staff must contend with simple ignorance. This is the case with many Government bodies, who are just unaware of rural realities, and why policies developed with an urban perspective are not always appropriate or equitable.

This lack of understanding is often accompanied by distrust or even resentment of MAF's involvement. Some departments perceive our involvement in their jurisdictions as interfering empire-building on our part. Particularly where they do not see a direct link with agriculture, they question our need to be involved. Our official responsibility in this area is relatively new, and has not been recognised by the Cabinet office, so that there is no official requirement for Departments to consult with MAF on issues affecting rural communities (as there is on issues affecting agriculture).

Even within MAF, there is a general lack of understanding of our work in this area. As noted above, there is a tendency to trivialise its importance. Social analysis is perceived as "soft" and lacking in the rigour of economic analysis. Some justify the social policy work by relating it back to agriculture, implying it has no validity in its own right.

Fortunately, some of these concerns are being overcome as MAF undertakes more integrated programmes. It is acknowledged that the social dimension is an important aspect of issues such as sustainable land use, and that programmes designed to include this element will be more robust.

Gradually this recognition is spreading to other departments and agencies. The RRU provides MAF Policy with a field capability which gives it credibility when purporting to give the rural view. Where MAF has been successfully involved in the work of other departments, they acknowledge that better policies have resulted.

CONCLUSION

Significant restructuring of the New Zealand economy has resulted in a new environment for rural communities. The Rural Resources Unit of MAF has responsibility for helping rural communities thrive in this new environment.

We do this largely through a facilitory role - helping communities help themselves. This involves ensuring that they have the tools to promote their own development; that they have access to the necessary information; and that they have input into policies which affect them. It also involves providing a voice for rural communities in official circles.

Our role also involves assisting other government departments and agencies, through helping them assess the rural impacts of their policies, and by providing them with useful information on rural communities through our field networks and research efforts.

Reviews recently completed (MAF 1994a and 1994b) indicate that the RRU has been successful in these endeavours. This is heartening progress for what is essentially a small Unit with a very large brief. It has been achieved by targeting our efforts and working in partnership with others. And although some resistance continues to be met to our work, acceptance and understanding are increasing, both within and outside of MAF.

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APPENDIX

Selected MAF Policy Technical Papers

(with a Rural Sociology Focus)

90/1	*Cyclone Bola: Agricultural Assistance Scheme: Social and Economic Impact Study* D Webber, D Buchan, MJ Rivers and T Rayner	Jan/90
91/5	*Public Policy and Rural Communities* D Webber and MJ Rivers	May/91
91/8	*The Waitangi Tribunal and Maori Land Claims:* Part 1: The Issues Part 2: The Crown GB Ogle	Jun/91
91/9	*Lending to Maori Farmers* GB Ogle	Jul/91
92/4	*The Contribution of Women to the Rural Economy Stage One: Scoping Report* MJ Rivers	Jun/92
92/6	Farmer and Farm Worker Health and Safety Survey Report RM Houghton and A Wilson	Jun/92
92/14	*New Zealand Regional Rural Diversity: Part 1: A 1986 Profile* J Newell	Sep/92
93/7	*Proceedings of a Workshop on Rural Community Studies held on 3 December 1992* RWM Johnson	Jun/93
93/8	*Scoping Study on Access of Rural People to Education Services* Julie Meade Rose	Jun/93
93/9	*Towards Self Help: Urban/Rural Differences in Access to Services* NZ Association of Citizens Advice Bureaux	May/93
93/14	*Summary of Selected Papers at the 8th World Congress of Rural Sociology* Ann Pomeroy	Jun/93
93/15	*Farmer Attitudes to Farm Safety* Margaret Wheatstone	Sep/93
93/16	*Farm Succession Viability and Retirement: Ten Case Studies from Canterbury* Hugh Eaton	Nov/93
94/2	*Research on Rural Topics with an Emphasis on Social Issues* Jo Lynch and Diane Anderson	Feb/94
94/3	*Relevant Government Policies and Programmes for Maoris Living in Rural Areas* John Hill	Jun/94
94/7	*Retirement and Succession in Farm Families in New Zealand (South Island)* Norah Keating and Heather Little	Feb/94
94/8	*Forestry and Community: A Scoping Study of the Impact of Exotic Forestry on Rural New Zealand Communities since 1980* Ruth Houghton	Sep/93

CONFERENCE REVIEW

"DOING THE RIGHT THING" AND "DOING THE THING RIGHT": THE TWIN CHALLENGES FOR RURAL PROFESSIONAL

Jonathan P. Sher — United States of America

What an amazing week this has been! And now, as we gather together one final time, we all are charged with the tasks of both bringing closure to the conference and developing a set of "marching orders" for the years ahead.

No doubt, we will put forward and endorse an impressive array of resolutions. I have every confidence they will deserve to be heeded, and that, if acted upon, their implementation would make this a better world. Our resolutions and recommendations can give direction to the kind of broad "conspiracy" in favour of rural development I called for at the outset of the conference. If *properly implemented*, this set of good ideas could dramatically improve both the quality and the sustainability of rural communities.

I am particularly heartened by the likelihood that our resolutions will be **international** in scope and **interdisciplinary** in character. Geographic boundaries, disciplinary divisions and professional turf considerations all are trivial when compared with the grander vision that has emerged and informed our work together this week. I have seen a hundred different and mutually reinforcing manifestations of such a vision; a vision of all rural people, rural professionals and rural policymakers conspiring together — plotting together toward a common goal, breathing together as one — to guarantee that rural communities not only survive, but also thrive in the coming years.

Governments need to act in accordance with our resolutions. "Ordinary" rural citizens and local community leaders need to act in accordance with our resolutions. Yet, above all others, **we must act** in accordance with our own resolutions. Indeed, one of the fundamental purposes of making resolutions in the first place is to help **us** remain **resolute** — even in the face of opposition, of indifference, and of the tremendous temptation to simply carry on with business as usual once we are no longer with each other. Others will not take our call for positive change seriously, if we, ourselves, do not take it to heart and allow our actions to be guided by our resolutions. There simply is no substitute for leading by example.

My suspicion is that the greatest temptation facing us as rural professionals is to remain so immersed in the *professional* culture — that is, the culture into which we have been socialized and from which we have reaped so many rewards — that we will undermine (even if subtly and unintentionally) the *rural* cultures we have pledged to assist and advance.

There is a great (and understandable) temptation for us to jealously guard our specialized knowledge, to communicate in our exclusive languages, to expect (if not demand) deference to our hard-won competence and professional judgment, and to seek validation of our efforts primarily from our peers. In other words, there is an entirely human temptation to cling tenaciously to our traditional sources of power and privilege — and to remain immersed in the culture of professionalism — even as we espouse the rhetoric of inclusion, empowerment, partnership, and egalitarianism.

Understandable as they are and powerful as they may be, we must find ways of resisting these professional temptations. Doing so need not imply a diminution of our competence nor any requirement to feign ignorance. Instead, resisting these temptations means primarily that we exhibit a new willingness and a heightened ability to experience our connectedness with the "ordinary" rural citizens we serve and to treat them as full and equal partners in the advancement of the communities and societies we share.

So, the question remains: What will **we do**? Having come to know some of you better, I now trust that the group gathered here today will go forward with a strengthened sense of solidarity — solidarity with each other and with the rural communities we serve. Moreover, I now also trust that we will move forward with a renewed commitment to our professional obligation to "do the thing right", but also with a renewed commitment to our ethical obligation to "do the right thing".

Doing the *right* thing is not a matter of technical prowess or professional competence. Highly skilled professionals (unfortunately) do bad and unethical things in our world with alarming regularity. Above all else, doing the right thing demands of us two ethical qualities: moral courage and respect.

Doing the right thing demands **moral courage**:

- to undertake research, policy development and action that powerfully improves the actual situation of rural people and places, instead of primarily advancing our own careers;
- to "speak truth to power" instead of playing it safe — and to speak in the voices allowing that truth to be both heard and heeded; and
- to be steadfast in accomplishing what's best for "ordinary" rural people and communities, instead of shrinking and slinking away in the face of controversy and criticism from "the powers that be" — or abandoning our rural brothers and sisters when the road gets rough and the going gets tough.

Doing the right thing also demands **respect**:

- for the inherent worth of "ordinary" rural people and the intrinsic value of rural places and communities;
- for their right to self-determination, and to be full and equal partners in the needs asessments, planning, implementation, and evaluation of the policies, programs and decisions that directly affect their lives;
- for their ability to both learn from us and teach us — in other words, respect for their experience, wisdom, traditions and perspectives; and
- for their real status as our brothers and sisters, our neighbors, our fellow citizens, and our full and equal partners in the struggle for genuine rural development (a struggle that began long before any of us were born, and that will continue as long as there are rural people and places). Our essential ethical obligation here is view and treat those with whom we are professionally involved as "people with lives", rather than as clients with problems, cases to be managed, supplicants to be handled, or as any of the other disempowering, passive roles into which "ordinary" rural people have been placed.

Our professional lives, this conference, all the rural work in which we engage (together and independently) after we depart later today are best thought of as this generation's contribution to the ongoing struggle for rural health, development and well-being. Our *challenge* is to act powerfully on the side of the angels in this particular corner of the larger arena in which good and evil fight for control over our lives and our world. Our *privilege* is to be able to use all we have been given — and all we have developed — in our professional lives to do the right thing in relation to the rural people and places we have the great good fortune to know and to touch.

STATEMENT OF PRINCIPLE

Emilia Martinez-Brawley — United States of America

Professor Emilia Martinez-Brawley developed the following Statement of Principle, following analysis of the various groups reports presented throughout the week. Conference resolved to adopt the following statement

"Conference recommends that

- an active focus on rural issues be encouraged by government and private sectors, by the communities themselves, by academic institutions, groups and citizens concerned with development and quality of life;
- a wide variety of views and new ways of thinking on how best to ensure the economic, social, cultural, educational, environmental and physical well-being of rural communities be encouraged and supported in commissioned reports, in academic papers, in conferences and in gatherings of citizens;
- included in all efforts should be the opinions of the spectrum of rural citizens, local community leaders, indigenous people, rural professionals and other involved parties;
- efforts be made for all rural citizens to work at the interface of cultures in awareness that diversity enriches us all; and
- the views of women, indigenous people and other groups who have been marginalised be incorporated to help shape policies and programs even when their views represent a different way of looking at the world - a different paradigm from that which is current. Concretely, it is apparent that rural communities need their strong voices to rise and be heard, and that they want to:

— secure a more equitable distribution of government and other resources going to rural and urban areas;

— create a cadre of academics and professionals who understand and are committed to serve rural areas in their practice and research; and

— keenly show the disproportionate needs of communities who have been historically underserved and unrepresented in the centres of power."

RESOLUTIONS

Conference moved

- That support be given to promotion and development of government policies and operating procedures which focus upon the selection and support of professionals trained specifically to work in rural areas

Moved: Dr Ian Gibson *Seconded: inaudible*

Carried

- That the preparation of professionals for rural and remote areas must include a variety of models for good practice

Moved: Ms Sheila King *Seconded: Sr Miriam McShane*

Carried

- That evaluation of student progress is one critical component of the educational process. Standardised testing must be only one of several measures including hands-on, cooperative learning, teacher produced and problem-solving based upon rural-relevant criteria

Moved: Ms Shirley Wyatt *Seconded: Ms Sheila King*

Carried

Note: Shirley Wyatt (USA) assumes responsibility to contact appropriate members among the Rural Education Caucus of the National Education Association to initiate an information-sharing network. We ask Conference delegates to identify themselves as willing to initiate dialogue within their respective countries and that those identified members become part of the international network of scholars

- That all academic researchers inquiring into issues affecting rural communities be encouraged to incorporate into their research designs procedures which link the findings and recommendations from the research into the policy and political decision-making processes

Moved: Dr Ian Gibson *Seconded: Mr Ian Paul*

Carried

- That Conference support the development of an international doctoral program in rural studies at James Cook University "with emphasis on mid-career practitioners, professionals, scholars and educators as candidates in the program".

Moved: Dr Jack Shelton *Seconded: Mr Dennis Griffith*

Carried

- That the Conference support the establishment of an international faculty to accommodate undergraduate and post-graduate studies being conducted in a range of institutions concerned with issues affecting rural communities

Moved: Dr Frank Rennie *Seconded: Mrs Anne Poole*

Carried

- That the Conference support the establishment of an international association of educators, practitioners, scholars and professionals engaged in rural and remote health, education, community and economic development and that a steering committee be established to create the association

Moved: Mr Paul Nachtigal *Seconded: Dr Jackie Spears*

Carried

Steering Committee: Dr D McSwan (Convenor), Dr T Haas, Dr K Stevens, Dr I Gibson, Dr D Hyman, Ms W Sadlier, Mrs S Wyatt, Dr B Cheers, Mr I Blue, Mr C Alfero, Prof A Halim, Dr C Boylan, Mr J Morrissey, Dr A Higgins, etc

- That governments and communities should join in the development of strategies which bring together local agriculture, business, professional and community groups in rural and remote areas towards assuring opportunities for individuals to seeks self-fulfilment and sustainable, high-quality communities. All efforts should be multi-faceted, addressing the overall community, including the social, economic, educational, cultural, health and human services, safety and justice and environmental aspects of development

Moved: Dr Drew Hyman *Seconded: Mr Mac McClymont*

Carried

Note: The agenda for the proposed international association and/or faculty should be encouraged to include these issues in their research, education and action agendas. The coordinating organisation should periodically request information, research results and examples of applications for dissemination to communities, governments and members

- That labour intensive technologies, practices, programs must be considered and prioritized while developing heavy and large scale industries. National and multi-national companies which generate job opportunities by establishing large scale industries must be regulated for maintaining the environment against pollution, labour misuse and destruction of local resources. Infrastructure development must be sustainable in terms of natural resources, environment and agriculture. Farm diversification along with prioritizing the government assistance to small and marginal farms need to be emphasised. Status be improved of cottage industries, handicrafts, small-scale business, entrepreneurship and rural marketing. Both bottom-up and top-down planning should be integrated for balanced growth and development. Local resources and indigenous technologies must be identified and be used with refinement. Community-based organisations and government agencies must act together for planning, implementation, monitoring, reviewing and evaluating of programs and projects. Government policy and community programs should address health, sanitation and housing issues, setting appropriate standards.

Moved: Prof Abdul Halim *Seconded: inaudible*

Carried

- That governments develop programs and strategies that support, rather than supplant, rural community development and that are derived through meaningful collaboration with rural communities and their citizens.

Moved: Dr Jackie Spears *Seconded: Dr Frank Rennie*

Carried

Note: Programs and service provision strategies that create or continue dependency relationships are harmful to rural people and their communities. This Conference resolves to develop descriptors of ways in which existing programs create/continue dependency relationships and propose program features which would be more appropriate to strengthening rural community capacity. Dr Jack Shelton and Dr Jackie Spears will take responsibility for disseminating a questionnaire, asking for examples of best practices/ inappropriate practices, collating the responses and sharing the results with Conference participants and other interested rural practitioners. Conference participants are then responsible for sharing this information with appropriate agencies in their respective countries.

- That any policy emphasis on development which has rural in its title must include an indigenous component and indigenous participation.

Moved: Mr Karl Cameron-Jackson *Seconded: Prof Abdul Halim*

Carried

- That if rurality is concerned with land usage, land, living space and a place in human consciousness, then by definition it must be recognised that indigenous people are rural. The Conference recognises Indigenous Knowledge and Ways of Knowing. Government agencies must acknowledge the validity of this knowledge and provide opportunities for indigenous people to make decisions concerning rural health, education and socioeconomic development.

Moved: Mr Paul Nachtigal *Seconded: Mr Karl Cameron-Jackson*

Carried

Note: We ask members of this Conference to identify themselves as members of indigenous and rural communities in all countries and to carry this message to their applicable agencies, communities and institutions and that these couriers be included as members of the International Network of Practitioners.

- That this Conference encourage government to accept the establishment of an infrastructure for communications technology in rural and remote areas as a social responsibility.

Moved: Ms Helen Taylor *Seconded: Lady Logan*

Carried

- That there should be equality of access to appropriate quality education and training in all rural and remote areas.

Moved: Mr Mac McClymont *Seconded: A/Prof Doug Lloyd*

Carried

- That women in rural and remote areas need greater access to appropriate further education.

Moved: Mr Mac McClymont *Seconded: Mr Dennis Griffith*

Carried

- That inequitable gender relations in rural and remote areas must be publicly challenged to allow women to achieve positions of power in rural society.

Moved: Mr Mac McClymont *Seconded: Mr Dennis Griffith*

Carried

- That local government, producer representative bodies and other organisations based in rural and remote areas should include women and broaden their focus to include issues affecting rural women.

Moved: Mr Justin O'Sullivan *Seconded: Ms Sheila King*

Carried

- That the processes of construction of knowledge about issues affecting rural communities must be informed by an adequate analysis of gender issues.

Moved: Helen Taylor *Seconded: inaudible*

Carried

- That locally-based affordable and appropriate childcare services, including provision for those unable to access community-based services, are necessary to support people in rural and remote areas so that they may fully participate in employment or other activities.

Moved: Mr Mac McClymont *Seconded: Mr Dennis Griffith*

Carried

- That use of chemical technologies in rural production must take account of health and social issues. Women must be part of the debate around the use of such chemicals.

Moved: Mr Mac McClymont *Seconded: Mr Dennis Griffith*

Carried

- That governments at all levels facilitate the integrated coordinated delivery of human/health services through appropriate and equitable funding mechanisms based on rurally-tailored funding formulae.

Moved: Mr Ian Blue *Seconded: Mr Dennis Griffith*

Carried

- That future conferences with rural/remote themes should ensure that every effort is made (and if possible sponsorship obtained) to enable a meaningful level of participation by those people from groups most affected by social and economic disadvantage and that the location of such Conferences be chosen with such cost-related issues of justice in mind.

Moved: Inaudible *Seconded: Mr David Craig*

Carried

CONFERENCE OVERVIEW

1) EMERITUS PROFESSOR TED SCOTT

The role of a rapporteur is primarily to synthesise and summarise the papers and deliberations. Given the structure of the Conference and the concurrent presentation of so many papers, the task hasn't been easy. Where my fellow rapporteur, Toni Haas, and I have been unable to attend a session, I have endeavoured to read the paper or to confer with whoever of us may have attended it. In essence, then, we have had access to all of the sessions.

I apologise in the following presentation for having identified by name but few of the many. It would have been an impossible task to reference everyone. Accordingly, I have been a bower bird choosing from and citing those papers that helped to give coherence and strength to my line of synthesis. By doing so, I am not passing value judgment on the contribution of any paper.

To commence my synthesis, I want to redefine the objectives of this Conference. As I see it there were three major objectives and a number of supplementary objectives.

The major objectives may be described as:

i) identification of some of the major issues in the areas of health, education and community development;

ii) exploration of cross-cultural and cross-disciplinary commonalities of these issues, and

iii) application of an international and interdisciplinary perspective to the mapping and remediation of the issues identified.

The supplementary objectives are set out on Page 1 of your programs and relate to a range of co-operative benefits. After the presentation of five major papers, 65 supplementary papers and 22 workshop sessions, how successful have we been?

The opening paper by Jonathan Sher, though focussed specifically on Australia, established a compelling frame of reference for synthesising what followed in the Conference. Jonathan's paper demonstrated quite clearly the universality of key issues identified here.

Jonathan began by recognising the lack of an agreed definition of "rural" - an observation supported by studies reported in the Conference. Here, by inference, rural was seen to cover small, under-privileged communities in North América, isolated farmers or crofters in North West Scotland, highland communities in Gippsland in Victoria, an isolated Aboriginal community in South Australia, to the town of Broken Hill in Western New South Wales.

These studies give substance to the claim that definitions of "rural" vary from country to country and within parts of the country. This was most poignantly illustrated by the press release by the president of the Queensland Farmers' Federation claiming exclusivity of application of the terms to "rural" farmers. A closer look at the population involved in the community case studies reported allows us to infer from among the many attributes of communities as least four dimensions which seem to be taken into account when describing any community as "rural", viz size, geographical location, culture and access to the services and amenities taken for granted in urban communities.

The issue becomes very complicated because if you wished to be precise you would need to plot communities in multi-dimensional space. Indeed, a very interesting and useful cross-cultural study would be to develop a model for profiling rural communities. For the present let's just agree that definitions of "rural" by governments, researchers, residents and others are, just like the communities themselves, idiosyncratic - an observation that must be taken into account when attempting to transfer development or service strategies from one rural setting to another.

Jonathan Sher, as did all following presenters, directed attention to rescuing or revitalising rural communities in decline, or in what Charlie Alfero referred to as downward socio-economic spiralling. As the many papers have echoed, this downward spiralling or decline is manifested in such critical areas as a significant downturn in farm and family incomes, uneven rewards for labour, scaling down or closing of rural support industries (eg closing of a cannery in a fruit growing area), reduction in community revenue which usually supports community employment, withdrawal of government and private services, eg closing of a school, shutting down a bank, reducing medical services, reduced employment opportunities - particularly for young people - depopulation and ageing population.

Case studies from America and Australia by Paul Nachtigal and Bernadette Bowie respectively highlighted the centrality of the school to, and its contribution to a sense of identify in, small towns. Removal of such a facility is often devastating to the economy of the community, its sense of community its morale and its very existence.

Smaller and more remote rural communities have historically faced difficulty in recruiting and retaining professionals.

In the course of the Conference, presenters and workshops addressed the problems of provision of health care and educational services to rural communities. Both groups recognised the problems faced in recruiting staff to live and work in rural areas and of retaining them. They also acknowledged the problem and efficacy of pre-service training, induction and continued in-service training. The papers presented by Thomas Doolan and Anna Nichols on the training of doctors for rural practice and by Col Boylan on the education and training of rural teachers highlighted the common problems faced by these professions. The workshop reports provided to you this morning will reveal the details of these commonalities.

Having read these reports it is important that I bring to your attention what appears to be an historical oversight in consideration of rural issues. I refer to the failure to acknowledge the role of women in rural communities and the rights and plight of indigenous people in rural areas. I understand that these oversights will be the subject of resolutions later today.

I turn now to the questions of remediation, sustainability and development. These terms are not synonymous but they are each seen as important concepts in improving the lot or rural communities. Much of the Conference was devoted to the theory and practice of doing just this.

Jonathan Sher specified six priority goals, in the Australian context, as the foundations of rural reconstruction (i) increasing the rural population, (ii) ensuring for a more equitable share for rural people of the wealth and assets derived from rural industries, (iii) diversifying economic activity in rural areas, (iv) increasing employment opportunities in rural communities, (v) improving the quality of rural life and (vi) developing stronger and more cohesive rural communities.

Perhaps one of the issues that should be addressed in the future is the extent to which these are also appropriate goals for rural reconstruction in other nations. For the moment, let us assume that they are appropriate.

How are these goals to be achieved? Sher advocated action through four avenues, viz (i) empowerment of rural communities and their individual citizens, (ii) responding to both the downside and upside of environmental considerations, (iii) entrepreneurship and (iv) education.

Recognition of the possibilities of three of these avenues, empowerment, entrepreneurship and education, has been reflected in the case studies and workshops presented in the Conference. Perhaps empowerment has received most attention with emphasis on drawing upon and developing both the individual and collective strengths within a community. Case studies presented by Paul Nachtigal and Jack Shelton exemplified this avenue and opened up possible strategies for use in other cultural settings.

At this point, however, it is wise to acknowledge the warning of Emilia Martinez-Brawley in her discussion of knowledge diffusion in the context of development in rural areas. Emilia argued that, in rural community development, we should find the "gems", the ideas, the strategies that may be diffused to other such communities.

Transfer of gems from one culture or context to another seldom works unless there are sufficient contextual similarities or, at the very least, adaptation of the gem towards a "best fit" situation.

Presenters and discussants from all countries represented were at one in recognising the role of education as a precondition and enabling strategy for change. If I can quote here from Sher, " empowerment involved reforming all rural educational institutions - from child care centres, through every level of formal schooling, to the multi-faceted world of adult and community education by helping them learn how to play their most positive roles in the overall rural development process."

Throughout this educational hierarchy acquisition of the cognitive processes, the physical skills and knowledge and appropriate attitudes to participate in community as a citizen, in management, in industry and in successful entrepreneurship are accepted as imperatives. Again one faces the question of what and how delivery systems. These issues were widely canvassed in the conference and cannot be synthesised to a paragraph or two here. Critical issues highlighted have been the need for curriculum reform, the role of modern teaching/learning technologies and real life experience. The housing project in Alabama outlined by Jack Shelton is an example of education for entrepreneurship through relevant community projects.

We were reminded again and again of the need in planning forward development to focus on the lives of people and to hear their voices. This was heavily stressed by Alan Brawley in his paper on social and community development in which he reminded us that economic growth should be seen as merely one among several strategies to the end of enhancing people's capabilities.

Having applied our chosen development strategies, what criteria might we apply to determine how successful we have been? In her paper "Clues to Community Survival", Vicki Luther provides a 20 clue checklist used in her work at Nebraska. I am not sure how this list was developed, but it is an interesting start. Perhaps a cross cultural study of characteristics of "successful" or "sustainable" rural communities might be a priority project for the future!

Throughout the Conference there appeared to be consensus that a major issue facing rural communities is the problem of access to services. There also appeared to be a consensus that access could be overcome by availability of money. Historically, in Australia at least, delivery of services through the availability of funding has had a political bias. I want to reference the paper by Dennis Griffith which offers a tested political bias free formula, the Service Access Score, which is adaptable to the delivery of almost any service dependent upon funding eg health, welfare, education and which, I suggest, has cross-cultural application.

The funding formula proposed by Griffith is based on three underlying assumptions, viz:

1. There is a direct relationship between the level of service available and population centre size.
2. Access to services is dependent upon the distance between the location of the client population and point of service.
3. Access to services is dependent upon the economic capacity of the community to meet the cost of overcoming distance.

The service access score is derived by applying a Principal Component Analysis to data derived from applying these assumptions to identified rural communities. For details and application of the formula I refer you to the Griffith paper.

In the many papers directed to identifying problem issues and/or strategies of addressing them, a number of discipline specific issues in the Australian context was considered. I have chosen not to detail them here. In the main they are covered in your summarised group reports.

Let us take stock of where we are. I have endeavoured to tease out the cross cultural rural issues raised and the evidence for them. In broad brush I have summarised some of the ways in which overcoming these issues may be addressed. In some measure then we have achieved our major objective.

The interdisciplinary and international nature of this Conference has been its strength. In my opening remarks I referenced a set of supplementary objectives. They relate to how we plan to profit from the experience. These issues will be taken up by Toni Haas.

I thank you for the opportunity of sharing with you and trust I have not misconstrued your contributions to any marked degree.

2) DR TONI HAAS

Thank you for the opportunity to hear and reflect on the papers presented at this Conference, and particular thanks to all of you who shared your private thoughts in conversations in between sessions. Three themes and three research issues have emerged this week, it seems to me. They are embedded in the papers we've heard and in the interviews and conversations we've held.

Theme One: Creating Community

The first theme is the importance of community to and for "right action". Each of the keynote speakers struck this theme, although each had a different way of describing it. Jonathan Sher urged us to a conspiracy or "breathing together" on behalf of rural places and the people who live in them. Paul Nachtigal reported that he heard people yearn to belong to and to contribute to something bigger than themselves and their private interests. Charlie Alfero proposed a new paradigm, one that suggested the best actions were created not out of individual, private interests nor even attention to group interests, but rather those designed to serve the best interests of the community. Emilia Martinez-Brawley gave us a felicitous phrase, "improved ways of caring".

It is clear that the old ways of caring are not sustainable. Throughout the week in a number of informal interviews and conversations people reported being tired, lonely, and hungry for validation and empathy. One social worker sighed that her work felt "like butter hitting the wall...we don't get anywhere." Brian Cheers suggested that these feelings of isolation result from physical distance, to be sure, but also from the unique perspective of the professional, who works at the intersection of horizontal (client) needs and vertical (funding source) pressures. Conference participants reported some success in dealing with these pressures through alliances, collaborations, and efforts that span bureaucratic boundaries.

The action implication for this theme is that we continue the community building that has begun at the Conference via an international organisation that models boundary-spanning. Its members will include, initially, professionals from areas represented at the Conference: Health, education and community development. It is our intention that membership expand to include people of all ages who actually make their lives in rural places. The purpose of the organisation will be to share approached to common problems and to support one another becoming knowledge builders.

Theme Two: "Right Action"

The second theme is about the necessity of ethical and moral underpinnings for our work. Jonathan's construction of "doing the thing right" (a technical approach) and "doing the right thing" (a moral approach) seems to me to present a false dichotomy. It is becoming clearer and clearer that they are intertwined, that you can't "do the thing right" without attention to "doing the right thing". The place that this showed up most vividly this week was in an emerging consensus about the importance of "doing with" rather than "doing to" the people it is our intention to help. We talked about clients not only being consulted about what services they need, but that the services will be most effective if clients are encouraged to shape them. Indeed, a fundamental shift seems in the offing, a shift in the nature of the relationship between service provider and service receiver to one that is reciprocal, not unilateral.

Reciprocal relationships require sharing power. The usual way to think about sharing power is that whoever happens to have it right now gives some of it to others. We are learning that that's not a useful model, for anytime one person gives something to another, the possibility exists that it can be taken back. Our more sophisticated understanding of sharing power is that people need to recognise, take and use the power that is rightly theirs. Helping them to do that is another "right action".

We are coming to recognise that intellectual property has value, and the process of gathering data/doing development reflects on the outcome of the work. We are beginning to understand that our work, our community is strengthened as we include more, diverse points of view. The process of listening to and learning from people who were formerly considered marginal is opening up the possibility of redefining problems, of creating solutions we couldn't have thought of before, and it is not always comfortable. Some of the disagreements and differences of opinion that arose during the conference are part of the price of belated inclusion. Rural people have been marginalised, as have indigenous people, as have women of all backgrounds, and their past contributions unheralded. We are trying to change that. Out goal is to work towards sustainable, long-term, shared benefits.

The action implication seems to be that, as members of this community, we hold mutual goals to infuse our work with ethical designs and behaviour. We can support one another with continual peer review. We can hold one another to account, and help one another to achieve our mutual goal. We can try to model social justice while working toward it.

Theme Three: A New Paradigm

Out of these two concerns, for community and for right action, a new paradigm for professional practice is beginning to emerge. That is the third theme. Its corollary is that new ways of practice will require new ways of training people for practice. We need to articulate the parameters of this new paradigm so that it can guide our future work.

Charlie Alfero devoted most of his presentation on a new paradigm for community medicine. Richard Fell broadened the ideas to cover all our professional practices when he reminded us that we were "adults working with adults". That implies a level of mutual regard and respect, of reciprocity, that reinforces the first two themes, but introduces an important element of mutual vulnerability.

Part of the new paradigm is a recognition that we are inextricably linked, that we share responsibility for one another. It is relatively easy to understand a community's vulnerability to, for example, the only locum available to take over a rural medical practice who turns out to be a child abuser or a drunk. We are all at risk, not just the particular people with whom he or she comes in contact. Just as important to understand is that, as a community, we all are vulnerable to an incompetent teacher, nurse, social worker, or politician. Therefore, we all have a stake in setting and monitoring adequate standards of practice.

Emilia reminded us that all knowledge is interpretative. Deciding what adequate standards are requires the wisdom of all the people who will be served by them. Self determination involves recognising and legitimating local knowledge, then acting upon it. We need to expand what we understand to be knowledge, what is known and how it comes to be known. The new paradigm will continue to emerge from knowledge in action. We need to continue to be aware of the process, to think abut how we think, and to articulate that to others.

The action implications of this theme reverberate throughout our day-to-day practice and echo in training programs. Together we can create more supportive ways of practice, behaviours that are informed by these themes and energised by one another's encouragement. On-going communication is one obvious first step. Another is to reduce professional isolation by designing and doing joint research and development projects. A third is to increase the involvement of practicing professionals in the design and implementation of training programs, considering part of our professional responsibility extending helping hands to people just entering the profession. Sabrina Knight and Anna Nichols have some great ideas about this.

Meta-issues for Research

So those are the three themes: community, right action, and articulating a new paradigm to support enlightened professional practice. That's important work we've begun together, and it comes from our experience, from what we've learned doing our work in health, in education, and in community development. I was struck, during the workshops, at the comment I heard over and over. "We knew that" people in health, in education or in community development would say, "But we didn't think that you knew that." Finally, I'd like to discuss some things that none of us appear to know, and they can be clustered into three meta-issues for research. Two of them are philosophical questions, one is technical and I will make a sandwich of them.

The first philosophic issue is how do we go about expanding the canon of what we recognise as knowledge to include formerly invisible topics; alternative, context-specific methodologies; new types and levels of evidence that satisfy demands for rigour? How do we invent an empowering education, creating tools for analysis that allow people to use information for their benefit? How do we develop metrics that count the real costs?

That is a philosophic issue. The technical issue is also around counting and costs. How do we educate ourselves and funders about designs for work that reflect an appropriate scope, scale and timelines so that efforts are meaningful and sustainable? How do we invent new models for support so that chasing funding does not occupy an inappropriate amount of researcher's and/or developer's time? How do we redesign the award system to recognise and reward quality, not quantity (that is, the size of the grant)? And the hardest notion of all: How do we think about social change without large amounts of outside funding? We are becoming more sophisticated about the strings that come with outside resources and may have fallen into the 'bigger is better' trap, when our experience tell us that too much money can choke small but meaningful initiatives and can be a distraction.

The final issue is also philosophic. As we move toward a better understanding and appreciation of the synergy that comes from collective action, how do we retain room for maverick individual insight and open to the possibilities for discontinuous change?

Thank you very much for the opportunity to learn with and from you this week. I leave you with my heartfelt gratitude and a quote from an American social commentator, Garrison Kehiler, "Be well. Do good work. Keep in touch."

CONFERENCE CLOSING ADDRESS

Emeritus Professor E Scott — Australia

David, Ladies and Gentlemen I am quite humbled by being asked to make the closing remarks at this particular Conference. I began my career as a teacher in a one teacher school, in the Riverina of New South Wales forty-five years ago.

I have never lost the love of ruralness and rural communities. When I joined the staff of the University, I committed myself to research in that area.

This week has been enthralling, not only to me but to all of you. It is not just an ordinary Conference, it has been an International Conference, it has been a cross-disciplinary Conference and the experience we have all had has been in learning of the concerns of those other disciplines of the things we have in common, of the way in which we can work together. Many of us have had our eyes open, to the problems of Indigenous people and as the last speaker said: 'to the real concerns of women in rural society'.

We have learnt to co-operate, to respect other points of view, to change our point of view, we have learnt to look to the future, when those friendships we formed will become working partnerships as we continue with the future that we have ahead.

At this stage, before I make my very final remarks, on your behalf I want to thank the organisers, David, his team, everyone who has worked so hard to make this Conference a reality and an historic event.

I am sure also, it has been a learning experience for us all in terms of Conference organisation and you can always have hindsight and I'm sure as you pass some of your motions, hindsight will be reflected in them and because we are people of vision, we will reflect on the recommendations that you have. I do hope, however, that what has happened more than anything else is that we have grown in confidence and that we have been inspired, inspired to go forward in our research field.

But please keep three things in mind, those who move forward remember this:

That in life as a whole, it is people who matter. Remember also that it is people who will make decisions. Remember again it is people who will implement decisions and remember, finally, it is people who will be affected by those decisions. Make them great.

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APPENDICES

1 EVALUATING DISTANCE EDUCATION MATERIALS FOR RURAL AND REMOTE AUSTRALIA
Ian W Gibson

2 RURAL EDUCATION RESEARCH AND DEVELOPMENT CENTRE AND RURAL HEALTH TRAINING UNIT PROSPECTUS

EVALUATING DISTANCE EDUCATION MATERIALS FOR RURAL AND REMOTE AUSTRALIA

Ian W. Gibson — Australia

ABSTRACT

This paper describes an evaluation strategy, and the type of information gained from its use, that was developed for a project funded by the Queensland State Department of Education to evaluate the completed components of the newly developed primary distance education materials. These materials, currently being employed in the education of isolated children enrolled in schools of distance education throughout Queensland, are markedly different from those previously employed. For the past few years, these materials have undergone a vigorous trial by distance education clients, including school of distance education teachers, home tutors and the children they serve.

Following the first two years of implementation, an evaluation study was commissioned to provide developers with feedback on their work, sufficient to allow both the product and the process to be refined. While focussing on the process employed during the evaluation activity as a model for future use, this paper also considers the principles and assumptions employed in developing these materials and describes the level of success attained.

Throughout this paper, methods of tapping the perceptions held by developers, teachers and home tutors, relating both to the process of implementation and to the materials developed for isolated student use, are explored. Further, the proposed evaluative process provides an indication of areas which require modification in both the process used and in the finished product. A final stage of the evaluation strategy described includes an assessment of student learning resulting from the use of the 'papers' and is designed to determine the effectiveness of the new materials in achieving their stated objectives.

The issues raised by this paper focus upon educational provision and the effect wrought on members of remote and diverse communities when change is introduced into an established system. Discussion will explore the crucial factors perceived to be necessary in guaranteeing success in such an endeavour. Such factors include the assumptions, intentions, processes and outcomes of the design and development of the materials, the process of implementation and its effect upon the users and the outcomes of distance education study for learners. The process of conducting such a large scale evaluation is described in full and held up for examination as a guide to others embarking upon such an activity.

INTRODUCTION

This paper describes the process used in an evaluation of the design, development and implementation practices employed in producing primary level distance education materials for use in Australia's outback. Designed to evaluate the quality and effectiveness of materials developed centrally for use in remote areas, the evaluation focused upon:

1. The assumptions, intentions, processes and outcomes of the design and development of distance education materials at the primary level.
2. The processes of implementation of these distance education materials across three user groups:

    students

    home tutors

    schools of distance education

3. The outcomes of distance education study for learners and its intended and unintended consequences.

BACKGROUND

The activities of 'schools of the air', 'correspondence schools' and 'schools of distance education' as a means of delivering educational services to isolated and remote locations have received much media attention over the years, and have, along with the Royal Flying Doctor Service, offered a romanticised view of outback life. Such levels of attention however, are more appropriately applied to analyses of the educational service provided by these organisations and the outcomes of such service.

Until recently, this attention has not considered an analysis of the accountability of the distance education 'papers', the process leading to their development, or the effectiveness of these activities. Full scale, strategic and regular evaluation exercises have been largely absent.

Further, the level of public attention afforded the provision of educational services to rural and remote Australia has attained a level of public standing not common for other areas of specialised educational service provision. Traditionally, both political and public processes have been called to bear on the issue of rural education services, and this level of attention has been maintained through the activities of strong and effective lobby groups, support agencies and rural parent and community action. Indeed, the level of national attention given to such activity has been increased recently as a result of the rural recession, economic downturn, the drought and their combined effect on rural families.

It would follow, then, that any effort to evaluate such a high profile, and often emotionally charged process would require the incorporation of input from all user groups. This input would include a degree of thoroughness and involvement that would be appropriate for an activity that has only recently undergone a high degree of change from that which has been traditionally accepted as 'the tried and true approach to distance education' by the majority of users. There is, therefore, a clear need identified for establishing an evaluation process that will generate data specfic to the needs of both developers and consumers and allow stakeholders the opportunity for formal input and regular, structured feedback on the materials which form the core of their educational activities.

This paper presents discussion of an evaluation methodology which focuses upon the perceptions of those involved in the development and use of distance education materials for primary aged children. In so doing, those crucial factors perceived to be necessary in guaranteeing success in such an endeavour are conceptualised and the question of quality assurance and meeting the differing needs of clients as a function of distance education services is raised for further analysis. In addition, the type of data resulting from conducting large scale evaluations of the type described is analysed.

LITERATURE REVIEW

In recognising differences in the learning context inferred by the term distance education, Keegan (1977, 12-17) raises the issue of the production of 'good courses' and the need to 'teach them well'. In listing additional needs such as specifically trained staff and the inherent problems of evaluation in this form of teaching, Keegan provides the context for Worthington's (1980) discussion of the need for curriculum, organisational, delivery and support system renewal in Queensland distance teaching systems. Worthington focuses upon the need to recognise the variety of delivery modes made possible by technological advances and stresses the necessity of breaking the nexus between curriculum design for distance education and traditional curriculum design. Further, Perraton (1981) suggests that any theory of distance education must be an evolving theory based upon current theories of educational practice and advances in communication technologies.

The question of support services for those consumers of distance education, still at the compulsory schooling age, often raises much attention. In a Commonwealth Schools Commission report on *Schooling in Rural Australia* (1987) an emphasis upon support services for students on distance education programs was raised and the need to improve such services was recognised. The same report referred to advances in communications technology and its impact upon the improvement of distance education services. The Commission's view was that technological advances are seen as likely to ease the difficulties associated with studying at home in remote areas.

During 1986, a report dealing with similar issues was forwarded to the then Queensland Minister for Education, the Honourable L W Powell, MLA. This report contained many supportive comments about existing distance education services and the dedication of present staff, but raised serious concerns focussing on the lack of co-ordination between the various levels and types of services and the effects this has had on the continuity of programs. The Commonwealth Schools Commission (1987) recognised the importance of these services and the difficulties emphasised by isolation, suggesting that the machinery for special education for example, was well established in the states but in almost all cases was not getting past the populated areas. The report concluded that for the educational good of isolated children and the sanity of their supervisors, accessibility to specialist services had to be facilitated and publicised.

The provision of specialised experiences for isolated learners has also been raised to the attention of service providers. The Commonwealth Schools Commission (1987) has suggested that "there is a special need for students from isolated communities to be given exposure to, and stimulation of interest in, other people and places. Understanding the way of life of other people does not mean that they will necessarily undervalue their own, and it should help them to make a more balanced choice for their future." (p105)

The same report presses further by focussing upon the role and functioning of those adults interacting with distance education learners. The following quotation clarifies the situation.

> "Parents of students studying at home using distance education services have special needs, particularly parents who act as 'home tutors'. These parents may often feel unable to provide adequate supervision for their child, due to lack of knowledge of subject matter or to lack of awareness of teaching methods or strategies. They may also feel that the home tutor role and the parent role are to some extent in conflict, especially in the small social world or a remote property. Home tutoring may also conflict with other responsibilities of the parent, such as assisting with necessary management and other tasks on a family farm. Conflicting responsibilities, as well as feelings of inadequacy in the home tutor role, can be especially stressful if the child studying at home has a disability or learning difficulty. (p49)

Even apart from the situation where specialist help is required, the role of the home tutor in supplementing the structured distance education materials being used by isolated learners has been raised for critical attention. Jennison(1992) goes to great lengths to provide evidence which confirms that "the educational program of the isolated child is dependent for its success on the active involvement of the home tutor". In emphasising the dependence of the untrained home tutor on the structured approach of current distance education materials, Jennison(1992) discusses the quality of these materials in ensuring success in a variety of home learning situations.

Documents obtained from the Queensland Department of Education indicated that considerable time and resources have been committed to the development of a support structure for distance education in that state. These documents also provided a framework which described those educational principles purported to be an acceptable theoretical foundation for the development, production and implementation of distance education materials.

A set of "ten guiding statements", developed as an outcome of the State Conference of the School of Distance Education by Hobbs (1988), is reported in both *Language Across Curriculum* (1992) and *School of Distance Education Conference Document* (1988). Hobbs suggests that:

- distance education should aim to ensure a broad curriculum for all;
- slow change in developing new materials and practices is necessary;
- the home tutors effort, time and expertise should not be overtaxed by new materials and practices;
- comprehensive communication with stakeholders is necessary throughout development process;
- home tutors need to be prepared for new formats and practices;
- materials should have unambiguous instructions and guides to assist home tutors in all program requirements;
- developers should have first hand familiarity with the home and learning environment of clients;
- materials and practices should have built in flexibility to accommodate changing conditions at all stages of materials development and use;
- distance education materials should assist in transition of students to other forms of education.

An analysis of these statements in the context of research conducted by Gibson and Hodgkinson (1994) has produced a set of educational principles (Table 1) upon which, the authors suggest, distance education materials production should be based.

It is data focusing upon these concerns that any evaluation of distance education materials, in use, should produce.

Table 1 - Principles underlying the development of distance education materials as perceived by school of distance education teachers, home tutors and developers

Principle	Contributing Factors
1. **Design** — Approach to the selection of objectives, content, teaching strategies, resources and evaluation techniques	Motivation Teaching approach Multigrade support Philosophical approach Support materials Evaluation
2. **Coverage** — Selection of actual content and range of content to be included in the materials	Covers syllabi Recognised standards Covers more than 'basics'
3. **Consultation** — Frequency of structured reference to stakeholders and incorporation of stakeholder input and needs in all aspects of the process	Stakeholder interaction Training for developers Training for implementors Feedback structures
4. **Communication** — Quality and clarity of messages forming the basis of verbal and written interaction prior to, during and following instructional sessions	Amount Clarity Precision Simplicity
5. **Practicality** — Appropriateness of materials and teaching approach to limitations of home classroom learning environments, levels of home tutor skill etc.	Time Bulk of materials Access to resources Format Limitations of home environment Reduced supervision Learning environment Environmental resources Resource Features
6. **Flexibility** — Adaptability of materials and teaching requirements to varying circumstances relating to time, locality, home environment and individual differences in students, home tutors and teachers	Range of strategies Delivery schedules Variety of content Relate to needs of SDE teachers Time Format to suit student need Resource selection

THE EVALUATION PROCESS

The goal of this proposed process is to evaluate the design, development, implementation and effectiveness of primary distance education materials produced for certain grade levels.

The rationale for this process is a simple one. The evaluation is necessary because the materials produced are either new or have been revised and are at the end of a trial period. Those people involved in the development, and implementation of the new materials need information on the effectiveness of the process and of the materials themselves. Those people involved in the use of the materials, the teachers and the home tutors, need to know that their input is sought and incorporated, as well as receiving regular feedback on material effectiveness. This process is designed around the belief that the most appropriate way to evaluate the materials is to seek information from those involved in their development and implementation. Effectiveness measures and criteria are established in collaboration with Schools of Distance Education (SDE) teachers in order to create a base line of student achievement data appropriate both as an immediate indicator of success and as a basis for future study and comparison.

This evaluation process involves two phases.

Phase 1

In the first phase, the process involves an evaluation of current distance education materials, and the design, development and implementation practices used by the sponsoring body.

This evaluation component of the process focuses sequentially on three inter-related areas:

1. The assumptions, intentions, processes and outcomes of the design and development of distance education materials at the primary level.
2. The processes of implementation of these distance education materials across three user groups: students, home tutors and teachers in schools of distance education.
3. The outcomes of distance education study for learners.

As the first phase of this study is a comprehensive evaluation of the materials and the implementation of those materials and their effectiveness, a series of staged sub-projects are designed to contribute to the overall intent of the study. In the process of implementing these sub-projects, each takes on the character of a separate study. Each sub-project employs its own research design and methodology.

Stage 1: Design and Development of Materials

This component of the study requires a retrospective analysis of the process of curriculum design and development employed in the conceptualisation and production of the materials or papers. Given the retrospective nature of the evaluation and the lack of comparative data, the design employed for both aspects of this phase is a one-shot case study.

Stage 2: Implementation of Materials

Involving a process evaluation of the implementation of the materials, the major focus of this second stage of the study is the collection of data from SDE teachers and home tutors on their perceptions of users of the materials, the features of the materials, and the materials in use. As this data was descriptive in nature, a one-shot-case study design is employed.

Stage 3: Effectiveness of Distance Education Materials

If no previous data exists on the performance of isolated children using similar or alternative materials, the product evaluation results in the development of a set of data which can be compared to the assumed objectives of the materials. Otherwise, additional data to that collected in previous years is generated. A one-shot-case-study is again employed as the most appropriate design. The data collected from this stage of the study focuses upon student achievement levels and SDE teacher reaction to the effectiveness of the papers.

Phase 2 — Longitudinal Study

This phase of the process employs the data gathered in all three stages of Phase 1 as a base line against which to measure future development of processes and materials. In this second phase, the data collected during the first phase of the process provides base line data for a longitudinal research study which follows distance education learners through primary into secondary and tertiary schooling. Such a study requires repeated visits to, and data collection from, a range of subjects over a period of ten years. For this aspect of the evaluation process, a time-series design is employed. This phase is not integral to the immediate evaluation of the materials but is of considerable importance in determining the ultimate outcomes of such forms of provision of educational services to isolated clients over time.

In summary, the entire evaluation process is designed to evaluate the quality of processes used and the effectiveness of materials developed centrally for use in remote areas and to add to, or provide sufficient base line data to view the materials and their effectiveness over time.

Significance of the Data Gathered Using This Evaluation Process

1. Materials employed in the education of isolated children enrolled in the Schools of Distance Education have been developed centrally. As these materials are markedly different to, or have been revised from those previously employed by home tutors and their students, this evaluation process will describe the principles and assumptions on which these materials are based, and the processes involved in their design and development during the activity of assessing their quality and identifying possible strengths and weaknesses.

2. The implementation of new or revised educational materials necessitates changes in practice on the part of those responsible for the implementation of these materials. This process will explore the similarities and differences between the assumptions and principles underlying the new materials, and the beliefs, capabilities and practices of those who are responsible for their implementation. This evaluation process will indicate areas requiring either further modification to the materials, or the need for increased communication with and further education of program implementors.

3. The existence of new or revised materials necessitates a product evaluation to determine the level of effectiveness reached in achieving stated objectives. This process provides, or adds to, base-line data required for such determinations.

4. The extensive review of user reactions to the product and the process of implementation of sets of distance education materials provides data which can be used to confirm or review any series of principles designed to guide the future development, production and implementation of distance education materials for Australian conditions.

5. This approach also provides an essential data base which can be used in tracking a group of students exposed to distance education in order to determine the effect such exposure has on their development.

6. The type of evaluation process described in this report will produce data that has not been available previously in the Queensland context. The publication of data resulting from multiple iterations of this process will fill a significant gap in the literature and will establish a process of evaluation for distance education materials which will contribute to the improvement of the provision of educational services to remote areas of Australia.

METHODOLOGY OF PROPOSED EVALUATION PROCESS

Populations

The populations used as units of analysis in this process comprise the three principal groups involved in the design, development and implementation of distance education materials. These three groups have been labelled developers, teachers from Schools of Distance Education(SDE) and home tutors. For the final stage of the evaluation, pupil performance data are provided by SDE teachers.

To assist in the analysis of data, population sub-groups are formed for ease of interpretation: writers and producers of materials, SDE teachers and home tutors from specific levels of schooling, and either single or multi-grade home tutors.

Those interviewed should represent the total group of developers, teachers and home tutors responsible for the materials under analysis, and all of the students currently using the materials. The sample of 'developers' includes writers responsible for the design, generation and coordination of the educational content of the materials and producers responsible for various aspects of the publication process. All data received from this group result from individual on-site interviews.

The teachers represent a system-wide population of those responsible for the use of materials at each of the year levels being investigated.

The third of the 'principal groups' comprising the sample are home tutors who take on, by force of circumstance, the responsibility of educating their children at home with the assistance of the materials produced by the developers and the support offered by teachers from the various SDE's. All Home Tutors must be provided with an opportunity to participate, but a process ensuring that data actually collected is derived from Home tutors who come from a variety of 'home classroom' situations ranging from isolated properties where one or more children of school age are unable to attend school due to their location, to situations governed by an itinerant lifestyle where a caravan or yacht might be the 'home classroom'.

For the final stage of the research, teachers report results on all children using the target set of materials from all Schools of Distance Education.

In summary, the methodology is designed to provide a point-in-time evaluation of the quality of materials including an evaluation of their implementation and of the learning outcomes experienced by students using them.

The Steering Committee

Throughout this process the evaluation team reports and coordinates its activity, validates instrumentation and modifies methodology through a steering committee representing the agencies commissioning the research. The existence of a steering committee provides a venue for both the evaluation team and the consumers of the research to negotiate processes to ensure that the study is serving each party's needs as circumstances change over the period of the study.

Data Collection Activity

The outline below shows data collection activity, samples and populations involved. Changes in the methodology should be discussed with and approved by the Steering Committee as the study progresses. The evaluation process involves:

Prestudy activity — a briefing of all populations including SDE Principals.

Stage 1 — Materials Design, Development and Production

(a) Structured face to face interviews with all staff involved in development.

(b) Review of data, by development staff, in the form of an interim report based upon data collected during Stage 1 (a).

(c) Revision of Interim Report in light of feedback received from subjects.

Stage Two — Implementation Processes

(a) Open ended, on-site interviews with a sample of home tutors.

(b) Briefing with any appropriate state level parent organisations.

(c) Questionnaire to all parent organisation members.

(d) Structured (telephone) interviews with sample of teaching staff in SDE's.

(e) Structured interviews with random sample of home tutors.

(f) Questionnaire to all staff of SDE's and to all home tutors involved with the year level materials being evaluated.

Stage Three - Product Outcomes

(a) Structured interview with stratified sample of teachers.

(b) Questionnaire to all relevant SDE teachers.

As can be inferred from the short descriptions above, the data collection procedures proposed in this process focus upon the use of interviews (on site and telephone) and questionnaires as the principal means of data collection. Supplementary data from existing documentation in the form of feedback sheets, letters from individuals involved in the process and policy documents etc add to the composite picture gathered.

Where interview schedules or questionnaire items are required, the evaluation team seeks advice from randomly selected representatives of the groups who respond to the proposed questionnaire or interview, develop or refine each item as a result of such advice, present a draft of the data collection devices back to those individuals and to the steering committee for the project and to a team of experienced researchers, unrelated to the project, for trialing, editing and reformulation of items.

In all cases involving interviews, permission must first be obtained from participants ahead of time and arrangements made by mutual convenience concerning the time and location of the interview. All participants must have prior knowledge of the intent, purpose and form of the interview ahead of time. Triangulation processes are incorporated whenever possible through the use of audio-tape recordings of the interviews, for use in confirmation of interpretations, or through the use of two interviewers taking individual sets of notes of the interview. The data obtained through this process are therefore subjected to processes designed to reduce interviewer bias and increase relevance and ownership of the data collected, as well as ensure both the reliability and validity of the reporting of resultant information. Such a detailed and time consuming approach to the development of data collection devices ensures results that are focused directly on the needs of all participants.

Construction of Formal Instruments

Instruments used throughout this study are designed to allow respondents sufficient latitude to provide their unrestricted views on the materials from their unique perspectives.

In all cases, the construction of the items encourages responses which focus upon the full range of concerns pertinent to the study, but remain open ended in the sense that responses are able to reflect the views of each group (unit of analysis) without being restricted by the structure of the question. Specific items used throughout this type of evaluation are designed to allow respondents sufficient latitude to provide their unrestricted views on those factors seen to be necessary considerations in the development of successful distance education materials from each of their unique perspectives. Although the form of each item may differ slightly depending upon its intended use in either interview or questionnaire format, or with each particular group, the substance of the items follow the directions indicated in the examples presented below.

1 What specific needs do isolated learners have?

2 For learners in isolated or rural areas to make good use of educational materials what special features must the materials have?

3 What are important considerations in the delivery or implementation of educational programs for isolated learners?

4 What educational services are needed by learners in isolated areas?

5 For what audience should the materials be developed?

6 What educational principles underlie the development of the materials?

7 What critical factors effect the development of curriculum materials for rural communities?

8 If you were not restricted in any way, what changes would you make to the materials?

9 What typifies good / effective distance education programs / materials?

10 With specific reference to the materials (Maths or LAC) what advice / concern / reaction would you have to their revision?

Data analysis

The value, to this design and methodology, of team analysis becomes increasingly obvious during data analysis sessions. During Stage 1, all data interpretations, categories and classifications are made to undergo stringent and critical scrutiny by all members of the team prior to acceptance. Part of this process is the continual search for connections within the raw data of the interviews and questionnaires. Repeated reference to interview tapes and written summaries creat an 'audit trail' for each concept and category developed. Frequent repetition of these processes within the treatment of each research question lend credibility, transferability, dependability and confirmability to the conclusions and groupings generated. An important feature of this data analysis process is the collaborative approach which should be adopted by the research team in the classification and analysis of data. Through the processes of 'inductive categorisation', 'investigator triangulation' and 'subjectivity audit' the evaluation team is able to provide comparable measures of 'authenticity of data' represented in more experimental, scientific studies through measures of reliability and validity. The process of 'inductive categorisation', or the categorisation of questionnaire responses through a process of repeated organisation and reorganisation of the data into logically related groupings forms the major activity within this section. Each member of the evaluation team analyses responses until natural groupings appear and then, through the application of the process referred to as 'investigator triangulation', defends the groupings to others in the team and adjusts categories until agreement is reached based upon reference, through an audit trail, to the raw data for verification. Any researcher subjectivity discovered during this process is identified and minimised through cross researcher comparison and agreement on data groupings. Through this process, the data retrieved from interviews with developers takes the form of a compiled reaction to the development and implementation process which equally represents the views of each developer sub-group.

The analysis of Stage 2 data is more quantitative than that described above for Stage 1. In this section, two responses for each question are required of respondents. Data resulting from these Likert scale responses are tabulated and medians are established for both responses, that is, for the programme as it is, and the programme as it should be. By asking respondents to react to each question in this way, a 'median difference' for each item is generated and areas of concern are thereby described by the magnitude of difference recorded for each item. The larger the median difference between the current and the ideal programme, the more concern about the topic is expressed by the sample population. Further, the resultant data describes where the responses for each item fall across the five point scale of response and clearly indicates how the responses are spread across the sample responding to the questionnaire.

Depending upon the decisions made by the steering committee regarding the variables to be used in the partition of the data, full sets of data could be generated for each variable or demographic descriptor. For example, in the evaluation project which gave rise to the process being described in this paper, the following variables were used: Year 1 respondents; Year Five respondents; Single grade respondents; Multi-grade respondents; Teacher respondents; and Home Tutor respondents. A summary table of all responses from each sub-group concluded the treatment of each set of questions. The questions could be grouped into those relating to the Maths materials, the Language Across the Curriculum (LAC) materials and General Features of the Materials. Further, additional divisions could be added by referring to questions that related to the Users of the Materials, the Features of the Materials and to the Materials in Use. Reference to the discussion on Findings will provide detailed examples of the information that could be derived from treating the data according to these divisions.

Stage 3, or the product evaluation component of the study, will produce data which are tied directly to the performance of the students working on the new or revised papers, and are based on both the records of the SDE teachers on each individual child and on the perceptions of these same teachers regarding the adequacy of coverage of the subject area by the materials being analysed. The data thus collected is tabulated with simple frequency counts and converted to percentages of respondents providing similar comments.

Types of Findings Resulting from the Proposed Evaluation Process

Data can be generated from three levels of analysis. Responses of all sub groups of the sample (ie Home Tutors, Teachers, Year 1, Year 5, Single Grade, Multi-grade and the combined summary) can be tabulated for items focusing upon the Users of the Materials, the Features of the Materials and the Materials in Use. Further expansion of these categories into items dealing specifically with General Aspects of the Program, Maths Materials and Language Across the Curriculum Materials completes the array of data categories generated by this process.

The example below, taken from the original project, describes the reaction of Home Tutors to those questions regarding the Users of the Materials with reference to the general aspects of the program. There would be similar data from Home tutors on the Features of the Materials and on the Materials in Use. Home Tutor comments would also be generated using the same categories of Users of the Materials for both Maths and LAC, Features of the Materials for both Maths and LAC, and Materials in Use for both Maths and LAC. A collection of responses from each sub sample group would be presented in the same manner as home tutor responses have been presented.

Example One

General Aspects of the Program

Users

Home Tutors

Table 2: Home Tutors' (median) ratings of general issues relating to current and ideal programs having regard to users of materials.

Home Tutors Users of Materials — General	Program Current	Ideal	Median Difference
12 School of Distance Education teachers are adequately prepared for the situations in which they work	3	5	2
1 The materials show that the developers understand the effect of geographic circumstances on the use of the materials	3	4	1
2 The materials show that those responsible for their development understand the specific problems associate with isolation	4	5	1
13 School of Distance Education teachers provide adequate support to home tutors	4	5	1
14 School of Distance Education teachers provide adequate support to children	4	5	1
17 The clients for materials are children	4	5	1
11 Enough School of Distance Education time is devoted to supporting the program	4	4	0
18 The clients for the materials are home tutors	4	4	0
19 The clients for the materials are School of Distance Education teachers	3	3	0

Responses in the table above have been organised based on descending order of magnitude of the median difference generated between the current and the ideal program. Home Tutor responses generated for Question 12, for example, all deal with whether Home Tutors feel that SDE teachers have sufficient training for the situations in which they work. The median response for the current program is evenly balanced between agree and disagree. That is, there are half of the responses from home tutors agreeing with that proposition and half that disagree. Looking at the responses generated by Home Tutors for an ideal program, the median response is at level five, or strongly agree. That is, half of the responses received from home tutors in reference to an ideal program indicate that there is strong agreement that SDE teachers should be adequately trained for the situations in which they teach, and the other half of the responses are spread across the other four levels of the scale. The importance of this division is that between the current and the ideal program, home tutors have registered a median difference of 2. The conclusion indicated by this magnitude of difference suggests that this issue would be worthy of attention in future programs as it is currently not meeting the expectations of home tutors in the current program.

Items displaying a median difference of 1 would indicate a smaller degree of concern by respondents. Those items displaying no difference between the current and the ideal program indicate that Home Tutors see no need for further attention to be paid to the topic.

An additional level of information can be gained from these tables. It would be misleading to assume that a median difference of, say, 2 on separate questions would indicate the same level of reaction. The position of each set of responses on the five point Likert Scale would have to be analysed. The columns dealing with responses to the current and the ideal program indicate the level at which the median response has occurred. If the median response for the current program on one question is 3, home tutors would be indicating that the responses are split between agree and disagree. If, then, the median response for the ideal program was five on the same question, home tutors would indicate that some improvement was required, as represented by the median difference of 2 registered for that question.

However, if the median difference for another question was also 2, a different interpretation would be necessary if the median response for the current program was 1, or strongly disagree and for the ideal program, a 3. It is necessary, therefore, to be aware of the level of responses generated for each question.

Example Two

In the table that follows, the responses of all sub-groups have been juxtaposed in order to provide an overview of responses to those questions dealing with general aspects of the program concerning the users. For ease of interpretation, only the response to the current program is displayed and contrasted to the median difference. This table allows variations in responses from each sub-group to be tracked and compared with other sub-group responses. The funding body is then able to make more appropriate decisions about the type of changes or revisions they might endorse to the program for particular sub-groups of the population, or they may even decide to approach a particular sub-group for further information on a particular topic in order to improve their understanding of the concern being expressed prior to any decisions regarding change or revision.

There would be a summary table of this type generated for all sub-group responses with specific reference to the Users of the Materials, the Features of the Materials and the Materials in Use for each of the three categories of General Aspects of the Program, The Maths Materials and the LAC Materials.

General Aspects of the Program

Users

Summary

Table 3: Median responses of all sub-groups to general issues as they relate to the users of the materials in the current program and the difference in medians for an ideal program.

Statements relating to users of the materials	Median	Year Level		Users		No. of Grade		School						
General		1	5	H	T	M	S	1	2	3	4	5	6	7
1. The materials show that the developers understand the effect of geographical circumstances on the use of the materials.	Current	3	3	3	3	3	4	3	3	4	3	3	4	3
	Difference	1	1	1	1	1	0	1	1.5	0	1	2	0	-1.5
2. The materials show that those responsible for their development understand the specific problems associated with isolation.	Current	2	3	4	2	2	4	3	2	2	2	3	2	3
	Difference	3	2	1	3	3	0	2	3	3	3	2	2.5	3
11. Enough SDE teacher time is devoted to supporting the program.	Current	4	4	4	3	3.5	4	4	4	3	2	4	4	4
	Difference	0	0	0	1.5	.5	0	1	0	1	3	1	0	0
12. SDE teachers are adequately prepared for the situations in which they work.	Current	2	3	3	2	2	3	3	3	3	2	3	3	2
	Difference	3	2	2	2.5	3	2	2	2	2	3	1.5	2	3
13. SDE teachers provide adequate support to home tutors.	Current	4	4	4	4	4	4	4	4	4	4	4	4	4
	Difference	1	1	1	1	1	1	1	1	1	1	1	1	1
14. SDE teachers provide adequate support to children.	Current	4	4	4	4	4	4	4	4	4	4	4	4	4
	Difference	1	1	1	1	1	1	1	1	1	1	1	1	1
17. The clients for the materials are children.	Current	4	4	4	4	4	4	4	4	4	4	4	4	4
	Difference	0	1	1	1	1	0	1	1	1	1	1	0	1
18. The clients for the materials are home tutors.	Current	4	3	4	4	4	4	4	4	4	3	4	3	3.5
	Difference	0	1	0	0	0	0	0	0	0	1	0	1	.5
19. The clients for the materials are SDE teachers.	Current	3	3	3	3	3	3	3	3	3	3	3	3	3
	Difference	0	0	0	1	0	0	0	.5	1	0	0	0	0

Key			
	H = Home Tutor	S = Single grade	Current = Median response to the current LAC program
	T = SDE Teacher	M = Multi-grade	D = Difference in median responses of current and ideal programs

Example Three

By way of further example of the intricacy of the detail generated by this process, the table below shows the median responses and the median difference of response, between the current and ideal program, of SDE teachers to the questions dealing with general aspects of the programs and with specific reference to the features of the materials.

SDE Teachers

Table 4: SDE Teachers' (median) ratings of general issues relating to current and ideal programs having regard to features of materials.

SDE Teachers Features of Materials — General	Program Current	Ideal	Median Difference
48. The materials explain how to use concepts	2	5	3
35. The physical amount of the materials is readily accommodated in the home tutor's situation	2	4	2
17. Unit overviews help home tutors organise their teaching	3	4	1
23. Additional resources provided in the materials are suited to students	4	5	1
28. Colour is an important motivating factor in the materials	3	4	1
46. A checklist of knowledge and skills to be developed in each unit is provided	3.5	4	0.5
24. Units should be designed to be completed in much shorter time periods than 2 weeks would more appropriately meet the needs of students	2	2	0
25. Units should be designed to be completed in much longer time periods than 2 weeks	2	2	0
36. The quality of the print materials is suitable to the purpose of the program	4	4	0
47. The materials include sufficient examples to explain concepts to be learned	4	4	0

Example Four

In this example, the table below provides data on the responses of subjects involved in the teaching of multi-grades to general issues relating to the materials in use. In combination with the other examples provided, and by looking carefully at the questions included in each of the tables represented, the reader can begin to understand the need for a thorough approach to the development of items relating to each particular topic.

Multi-Grade

Table 5: Median responses of those involved with multi year levels to general issues relating to the materials in use as they exist in the current program and as they would appear in an ideal program

Multi Grade Materials in Use — General	Program Current	Ideal	Median Diff
41. Materials are delivered to School of Distance Education's when optimum use can be made of them	2	5	3
42. Materials are delivered to home tutor's when optimum use can be made of them	2	5	3
5. An appropriate sequence of subject matter is present in the Language across the Curriculum materials	4	5	1
9. Appropriate testing methods are present in the Language across the Curriculum materials	3	4	1
17. Unit overviews help home tutor to organise their teaching	3	4	1
18. Instructions for independent work in Language across the Curriculum materials are easily followed by students	3	4	1
21. Additional resources provided to support the Language across the Curriculum materials are matched to the subject matter	4	5	1
8. Objectives suited to students are present in the maths materials	4	4	0
21. Additional resources provided to support the Language across the Curriculum materials are matched to the subject matter	4	5	1
8. Objectives suited to students are present in the maths materials	4	4	0
16. The maths materials cater to a variety of learning styles	4	4	0
19. Instructions for independent work in maths materials are easily followed by students	4	4	0
20. The integrated approach of the Language across the Curriculum units facilitates learning	4	4	0
40. The coverage of handwriting in the Language across the Curriculum materials is appropriate	4	4	0

Example Five

This table, and the table immediately following, provides data from stage three of the evaluation process which focuses upon the product evaluation stage of the process. It is in these tables that the reader is able to get an idea of the effectiveness of the materials in meeting the stated objectives related to each subject area, and the effectiveness of the additional activities provided by SDEs in meeting those same objectives.

In Table 6, the first column includes statements of objectives drawn from the published syllabus guidelines of the Department of Education. The second column indicates which of the materials or the additional activities are being referred to. The figures are percentages of the total possible responses, the columns representing grade levels indicate the total response regarding the degree of successful achievement of the specified objectives in the Year 1 materials and the Year 5 materials.

Table 6, not surprisingly, has a good percentage of responses from each school indicating that the LAC materials cater well to the published Language Arts objectives. Again, not surprisingly, the Maths materials do not do a particularly good job of catering to the Language Arts objectives. There is a variable response from individual schools regarding the effectiveness of the Additional Activities provided in catering to the same objectives.

Similar tables would display the effectiveness of the LAC and Maths materials and Additional Activities in achieving the published objectives of the Mathematics syllabus, the Social Studies syllabus, the Science syllabus and so on.

Language Arts

Table 6: Teachers' views of the effectiveness of materials and associated activities in achieving objectives presented in the Language Arts syllabus documents - expressed in percentages of the possible responses in each category.

Stated Objectives	Materials	Schools							Year Level		Total
The child displays the ability to:		1	2	3	4	5	6	7	1	5	
• write in a variety of genres	LAC materials	100	100	67	100	100	100	100	77.8	100	88.2
	Maths materials	0	0	17	25	0	0	0	11.1	5.9	8.8
	Addit'l activities	50	80	58	75	100	100	100	72.1	76.5	76.5
• read in a variety of genres	LAC materials	100	100	75	100	100	100	100	88.9	94.1	91.2
	Maths materials	0	20	42	50	75	60	0	50	35.3	41.2
	Addit'l activities	50	80	25	75	100	100	50	72.2	82.4	77.4
• speak clearly in a variety of situations	LAC materials	100	100	85	100	100	100	100	77.8	100	88.2
	Maths materials	0	60	33	25	75	0	50	38.9	41.2	35.3
	Addit'l activities	50	100	67	100	100	80	100	83.3	82.4	82.4

Table 7 continues the analysis of the product evaluation of the materials by focusing upon the percentages of children who, in the opinion of their teachers, function at a satisfactory level in relation to the stated objectives of, in this case, Language Arts. By thorough analysis of these data, individual schools can assess their own needs in terms of modifying the materials for their own populations and the funding agency and the developers can assess shortcomings of each set of papers in relationship to particular objectives.

Table 7: Percentages of children reported by teachers as reaching satisfactory levels of performance in relation to the stated objectives of the Language Arts.

Stated Objectives	Schools							Year Level		Total	
The child displays the ability to	1	2	3	4	5	6	7	1	5	Res	Subj
• write in a variety of genres	96	99	90	71	90	80	100	86.2	87.9	86.9	86.9
• read in a variety of genres	96	87	90	79	90	92	92	83.3	91.8	89.5	88.5
• speak clearly in a variety of situations	91	96	82	89	87	92	92	89.1	90.5	90.7	88.9
• speak logically in a variety of situations	96	96	90	100	95	84	92	92.8	91.8	92.5	91.9
• listen effectively in a variety of situations	100	96	79	100	95	88	89	94.5	87.3	95.4	90.6
• participate willingly in language activities	91	98	78	82	10	88	92	95.7	84.8	89	84.8
• think imaginatively	91	96	74	89	90	88	96	94.5	81.6	87.9	83.2
• think logically	100	94	90	93	95	98	96	86.2	90.5	93.7	88.2
• appreciate language as essential for communication	100	100	74	100	10	82	96	96.4	84.2	93.7	89.6

Key to Tables: Lev. = level , Res. = Responses , Sub. = Subjects.

Types of Conclusions Derived from this Evaluation Process

In addition to the very specific information contained in each of the tables discussed above, the major conclusions that could be derived from a compilation of those specifics could refer to the level of acceptance of the materials, generalised statements on student attainment, summaries of the level of acceptance of a particular collection of materials (e g Maths or Language Across the Curriculum at a particular year level), a measure of the level of effectiveness of dealing with a particular sub topic within the collection of materials, comments on the place and effectiveness of the materials in an overall program of study, reference to gaps in the materials regarding content but also teaching strategies, a focus upon the multi-graded context and the concerns such a teaching situation creates when reacting to materials designed for single graded situations, the role of schools of distance education teachers, their level of training or preparation for distance education, variable reactions generated by individual school peculiarities or idiosyncrasies in client population, the role of evaluation, the needs of users, the recognition of needed standards for the materials in both development and student performance terms, processes of design and development, resources and timelines, general work organisation of the agency responsible for development of the materials, the implementation strategy, and the success of interfaces between collaborating agencies (e g schools and central development agency).

Types of Recommendations Derived from this Evaluation Process

While it is very clear that an analysis of the tabulated data resulting from such an evaluation process will yield very specific recommendations that developers can incorporate into future revisions of the distance education materials, a study of this scope usually requires a smaller number of recommendations that might be communicated to the funding agency for immediate treatment. Such recommendations might focus upon the creation of operationally efficient development teams, the creation of a recognised evaluation strategy based upon record keeping, the need to guarantee equitable treatment for students across all schools, the need to guarantee comparable coverage of all subject matter, the need to guarantee that all client groups are served appropriately by the materials, an analysis of the system of delivery of the materials to the place of learning, the need for the materials and the distance education program generally to keep pace with the requirements of modern technology and educational theory, the needed focus upon multi-grade contexts, creation of an educational program to 'market' the materials and their approach to parents, training for teachers, induction for developers, the need for comparable data over a number of years, the availability of the materials for other teaching contexts, and the need for collaboration between participating agencies.

Attendant Issues

As the nature of distance education is dependent upon more than just a set of well designed and constructed materials, data collected tends to incorporate reference to many additional factors which effect the success of the overall product of student learning. At times, respondents will have difficulty drawing the line between these factors and those relating directly to the materials. For example, reference could be made to the need for legislation guaranteeing adequate budget authority for organisations attempting to overcome the 'tyranny of distance' in supplying an equal educational opportunity for isolated learners, the need for a specialised support service structure (including special education services, counselling and materials support), the establishment of information networks for home tutors or subsidised access to existing community infrastructures. Instrumental improvements to existing systems of communication using current and improved technologies as the basis of educational delivery systems or re-establishing delivery processes and access to commercially available resources might also be referenced through this process. The most frequent suggestion however, is likely to be the need to provide opportunities for social interaction and social skill development as frequently as possible, and via whatever technologies are available.

Clearly, there is more to the question of what makes a good distance education service than ensuring quality materials. While the data gathering processes described above have the intention of gathering very specific data concerning specific aspects of the materials themselves, respondents have the opportunity to provide more than is originally requested.

CONCLUSIONS

While the methodology described in this paper provides data relating to the principles suggested in the literature as central to the success of distance education materials, it is not designed to provide statistically significant and conclusive data supporting the centrality of certain principles as guarantees for success in the development of distance education materials for primary aged children. Nonetheless, it is clear that agreement on general factors from the three principal groups involved in the design, development and implementation of these materials would indicate substantial credibility for the claim that such factors as those proposed in Table 1 by Gibson and Hodgkinson (1994) should hold a central place in the design and development of distance education materials. The literature providing the theoretical backdrop to this study also confirms the need for recognition of those factors and principles which guarantee equality of educational opportunity and quality assurance to all consumers of educational services regardless of location. Although recognition of the necessity of specialised support services and their coordination in the provision of acceptable educational services to distance learners is likely to occur, this evaluation process is designed to focus predominantly upon the materials themselves. With this process, the question of contextualisation of the educational service being evaluated is also considered in the final analysis of the suitability and quality of any service provided to learners studying at a distance.

Although it is clear that variations of opinion on specifics will occur between the three principal sub-groups of the sample, little argument exists on the importance of the major principles that are seen to provide a foundation for effective distance education materials. Further, data resulting from the methodology described above will provide additional evidence of the centrality of issues of design, coverage, consultation, communication, practicality and flexibility to those intimately involved in the design, development and implementation of materials intended for primary distance education learners.

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